Attachments to Staff Briefing Papers for Docket No. E-132/CG-15-255

Attachment 1 – Minn. Stat. § 216B.164 (Cogeneration and Small Power Production)

Attachment 2 – Minn. Rules (Cogeneration and Small Power Production)

Attachment 3 – 2015 First Special Session Law, Chapter 1, article 3, section 21

Attachment 4 – PUC Order Adopting Rules, (Cogeneration and Small Power Production), Docket E-999/R-80-560, issued March 7, 1983

Attachment 5 – List of documents filed by PEC on April 1, 2015

Attachment 6 – Dockets filed in eDockets for 14-9 (2013 Qualified Facilities Report) and 14-10 (2013 Distributed Generation Report)

216B.164 COGENERATION AND SMALL POWER PRODUCTION.

Subdivision 1. **Scope and purpose.** This section shall at all times be construed 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.

Subd. 2. **Applicability.** This section as well as any rules promulgated by the commission to implement this section or the Public Utility Regulatory Policies Act of 1978, Public Law 95-617, Statutes at Large, volume 92, page 3117, and the Federal Energy Regulatory Commission regulations thereunder, Code of Federal Regulations, title 18, part 292, shall, unless otherwise provided in this section, apply to all Minnesota electric utilities, including cooperative electric associations and municipal electric utilities.

Subd. 2a. **Definitions.** (a) For the purposes of this section, the following terms have the meanings given them.

(b) "Aggregated meter" means a meter located on the premises of a customer's owned or leased property that is contiguous with property containing the customer's designated meter.

(c) "Capacity" means the number of megawatts alternating current (AC) at the point of interconnection between a distributed generation facility and a utility's electric system.

(d) "Cogeneration" means a combined process whereby electrical and useful thermal energy are produced simultaneously.

(e) "Contiguous property" means property owned or leased by the customer sharing a common border, without regard to interruptions in contiguity caused by easements, public thoroughfares, transportation rights-of-way, or utility rights-of-way.

(f) "Customer" means the person who is named on the utility electric bill for the premises.

(g) "Designated meter" means a meter that is physically attached to the customer's facility that the customer-generator designates as the first meter to which net metered credits are to be applied as the primary meter for billing purposes when the customer is serviced by more than one meter.

(h) "Distributed generation" means a facility that:

(1) has a capacity of ten megawatts or less;

(2) is interconnected with a utility's distribution system, over which the commission has jurisdiction; and

(3) generates electricity from natural gas, renewable fuel, or a similarly clean fuel, and may include waste heat, cogeneration, or fuel cell technology.

(i) "High-efficiency distributed generation" means a distributed energy facility that has a minimum efficiency of 40 percent, as calculated under section 272.0211, subdivision 1.

(j) "Net metered facility" means an electric generation facility constructed for the purpose of offsetting energy use through the use of renewable energy or high-efficiency distributed generation sources.

(k) "Renewable energy" has the meaning given in section 216B.2411, subdivision 2.

(l) "Standby charge" means a charge imposed by an electric utility upon a distributed generation facility for the recovery of costs for the provision of standby services, as provided for in a utility's tariffs approved by the commission, necessary to make electricity service available to the distributed generation facility.

Subd. 3. **Purchases; small facilities.** (a) This paragraph applies to cooperative electric associations and municipal utilities. For a qualifying facility having less than 40-kilowatt capacity, the customer shall be billed for the net energy supplied by the utility according to the applicable rate schedule for sales to that class of customer. In the case of net input into the utility system by a qualifying facility having less than 40-kilowatt capacity, compensation to the customer shall be at a per kilowatt-hour rate determined under paragraph (c) or (d).

(b) This paragraph applies to public utilities. For a qualifying facility having less than 1,000-kilowatt capacity, the customer shall be billed for the net energy supplied by the utility according to the applicable rate schedule for sales to that class of customer. In the case of net input into the utility system by a qualifying facility having: (1) more than 40-kilowatt but less than 1,000-kilowatt capacity, compensation to the customer shall be at a per kilowatt-hour rate determined under paragraph (c); or (2) less than 40-kilowatt capacity, compensation to the customer shall be at a per-kilowatt rate determined under paragraph (d).

(c) In setting rates, the commission shall consider the fixed distribution costs to the utility not otherwise accounted for in the basic monthly charge and shall ensure that the costs charged to the qualifying facility are not discriminatory in relation to the costs charged to other customers of the utility. The commission shall set the rates for net input into the utility system based on avoided costs as defined in the Code of Federal Regulations, title 18, section 292.101, paragraph (b)(6), the factors listed in Code of Federal Regulations, title 18, section 292.304, and all other relevant factors.

(d) Notwithstanding any provision in this chapter to the contrary, a qualifying facility having less than 40-kilowatt capacity may elect that the compensation for net input by the qualifying facility into the utility system shall be at the average retail utility energy rate. "Average retail utility energy rate" is defined as the average of the retail energy rates, exclusive of special rates based on income, age, or energy conservation, according to the applicable rate schedule of the utility for sales to that class of customer.

(e) If the qualifying facility or net metered facility is interconnected with a nongenerating utility which has a sole source contract with a municipal power agency or a generation and transmission utility, the nongenerating utility may elect to treat its purchase of any net input under this subdivision as being made on behalf of its supplier and shall be reimbursed by its supplier for any additional costs incurred in making the purchase. Qualifying facilities or net metered facilities having less than 1,000-kilowatt capacity if interconnected to a public utility, or less than 40-kilowatt capacity if interconnected to a cooperative electric association or municipal utility may, at the customer's option, elect to be governed by the provisions of subdivision 4.

Subd. 3a. **Net metered facility.** (a) Except for customers receiving a value of solar rate under subdivision 10, a customer with a net metered facility having a capacity of 40 kilowatts or greater but less than 1,000 kilowatts that is interconnected to a public utility may elect to be compensated for the customer's net input into the utility system in the form of a kilowatt-hour credit on the customer's energy bill carried forward and applied to subsequent energy bills. Any net input supplied by the customer into the utility system that exceeds energy supplied to the customer by the utility during a calendar year must be compensated at the applicable rate.

(b) A public utility may not impose a standby charge on a net metered or qualifying facility:

(1) of 100 kilowatts or less capacity; or

(2) of more than 100 kilowatts capacity, except in accordance with an order of the commission establishing the allowable costs to be recovered through standby charges.

Subd. 4. **Purchases; wheeling; costs.** (a) Except as otherwise provided in paragraph (c), this subdivision shall apply to all qualifying facilities having 40-kilowatt capacity or more as well as qualifying facilities as defined in subdivision 3 and net metered facilities under subdivision 3a, if interconnected to a cooperative electric association or municipal utility, or 1,000-kilowatt capacity or more if interconnected to a public utility, which elect to be governed by its provisions.

(b) The utility to which the qualifying facility is interconnected shall purchase all energy and capacity made available by the qualifying facility. The qualifying facility shall be paid the utility's full avoided capacity and energy costs as negotiated by the parties, as set by the commission, or as determined through competitive bidding approved by the commission. The full avoided capacity and energy costs to be paid a qualifying facility that generates electric power by means of a renewable energy source are the utility's least cost renewable energy facility or the bid of a competing supplier of a least cost renewable energy facility, whichever is lower, unless the commission's resource plan order, under section 216B.2422, subdivision 2, provides that the use of a renewable resource to meet the identified capacity need is not in the public interest.

(c) For all qualifying facilities having 30-kilowatt capacity or more, the utility shall, at the qualifying facility's or the utility's request, provide wheeling or exchange agreements wherever practicable to sell the qualifying facility's output to any other Minnesota utility having generation expansion anticipated or planned for the ensuing ten years. The commission shall establish the methods and procedures to insure that except for reasonable wheeling charges and line losses, the qualifying facility receives the full avoided energy and capacity costs of the utility ultimately receiving the output.

(d) The commission shall set rates for electricity generated by renewable energy.

Subd. 4a. **Aggregation of meters.** (a) For the purpose of measuring electricity under subdivisions 3 and 3a, a public utility must aggregate for billing purposes a customer's designated meter with one or more aggregated meters if a customer requests that it do so. To qualify for aggregation under this subdivision, a meter must be owned by the customer requesting the aggregation, must be located on contiguous property owned by the customer requesting the aggregation, and the total of all aggregated meters must be subject to the size limitation in this section.

(b) A public utility must comply with a request by a customer-generator to aggregate additional meters within 90 days. The specific meters must be identified at the time of the request. In the event that more than one meter is identified, the customer must designate the rank order for the aggregated meters to which the net metered credits are to be applied. At least 60 days prior to the beginning of the next annual billing period, a customer may amend the rank order of the aggregated meters, subject to this subdivision.

(c) The aggregation of meters applies only to charges that use kilowatt-hours as the billing determinant. All other charges applicable to each meter account shall be billed to the customer.

(d) A public utility will first apply the kilowatt-hour credit to the charges for the designated meter and then to the charges for the aggregated meters in the rank order specified by the customer. If the net metered facility supplies more electricity to the public utility than the energy usage recorded by the customer-generator's designated and aggregated meters during a monthly billing period, the public utility shall apply credits to the customer's next monthly bill for the excess kilowatt-hours.

(e) With the commission's prior approval, a public utility may charge the customer-generator requesting to aggregate meters a reasonable fee to cover the administrative costs incurred in implementing the costs of this subdivision, pursuant to a tariff approved by the commission for a public utility.

Subd. 4b. **Limiting cumulative generation.** The commission may limit the cumulative generation of net metered facilities under subdivisions 3 and 3a. A public utility may request the commission to limit the cumulative generation of net metered facilities under subdivisions 3 and 3a upon a showing that such generation has reached four percent of the public utility's annual retail electricity sales. The commission may limit additional net metering obligations under this subdivision only after providing notice and opportunity for public comment. In determining whether to limit additional net metering obligations under this subdivision, the commission shall consider:

(1) the environmental and other public policy benefits of net metered facilities;

(2) the impact of net metered facilities on electricity rates for customers without net metered systems;

(3) the effects of net metering on the reliability of the electric system;

(4) technical advances or technical concerns; and

(5) other statutory obligations imposed on the commission or on a utility.

The commission may limit additional net metering obligations under clauses (2) to (4) only if it determines that additional net metering obligations would cause significant rate impact, require significant measures to address reliability, or raise significant technical issues.

Subd. 4c. **Individual system capacity limits.** (a) A public utility that provides retail electric service may require customers with a facility of 40-kilowatt capacity or more and participating in net metering and net billing to limit the total generation capacity of individual distributed generation systems by either:

(1) for wind generation systems, limiting the total generation system capacity kilowatt alternating current to 120 percent of the customer's on-site maximum electric demand; or

(2) for solar photovoltaic and other distributed generation, limiting the total generation system annual energy production kilowatt hours alternating current to 120 percent of the customer's on-site annual electric energy consumption.

(b) Limits under paragraph (a) must be based on standard 15-minute intervals, measured during the previous 12 calendar months, or on a reasonable estimate of the average monthly maximum demand or average annual consumption if the customer has either:

(i) less than 12 calendar months of actual electric usage; or

(ii) no demand metering available.

Subd. 5. **Dispute; resolution.** In the event of disputes between an electric utility and a qualifying facility, either party may request a determination of the issue by the commission. In any such determination, the burden of proof shall be on the utility. The commission in its order resolving each such dispute shall require payments to the prevailing party of the prevailing party's costs, disbursements, and reasonable attorneys' fees, except that the qualifying facility will be required to pay the costs, disbursements, and attorneys' fees of the utility only if the commission finds that the claims of the qualifying facility in the dispute have been made in bad faith, or are a sham, or are frivolous.

Subd. 6. **Rules and uniform contract.** (a) The commission shall promulgate rules to implement the provisions of this section. The commission shall also establish a uniform statewide form of contract for use between utilities and a net metered or qualifying facility having less than 1,000-kilowatt capacity if interconnected to a public utility or less than 40-kilowatt capacity if interconnected to a cooperative electric association or municipal utility.

(b) The commission shall require the qualifying facility to provide the utility with reasonable access to the premises and equipment of the qualifying facility if the particular configuration of the qualifying facility precludes disconnection or testing of the qualifying facility from the utility side of the interconnection with the utility remaining responsible for its personnel.

(c) The uniform statewide form of contract shall be applied to all new and existing interconnections established between a utility and a net metered or qualifying facility having less than 40-kilowatt capacity, except that existing contracts may remain in force until terminated by mutual agreement between both parties.

Subd. 7. [Repealed, 1994 c 465 art 1 s 27]

Subd. 8. **Interconnection required; obligation for costs.** (a) Utilities shall be required to interconnect with a qualifying facility that offers to provide available energy or capacity and that satisfies the requirements of this section.

(b) Nothing contained in this section shall be construed to excuse the qualifying facility from any obligation for costs of interconnection and wheeling in excess of those normally incurred by the utility for customers with similar load characteristics who are not cogenerators or small power producers, or from any fixed charges normally assessed such nongenerating customers.

Subd. 9. **Municipal electric utility.** For purposes of this section only, except subdivision 5, and with respect to municipal electric utilities only, the term "commission" means the governing body of each municipal electric utility that adopts and has in effect rules implementing this section which are consistent with the rules adopted by the Minnesota Public Utilities Commission under subdivision 6. As used in this subdivision, the governing body of a municipal electric utility means the city council of that municipality; except that, if another board, commission, or body is empowered by law or resolution of the city council or by its charter to establish and regulate rates and days for the distribution of electric energy within the service area of the city, that board, commission, or body shall be considered the governing body of the municipal electric utility.

Subd. 10. **Alternative tariff; compensation for resource value.** (a) A public utility may apply for commission approval for an alternative tariff that compensates customers through a bill credit mechanism for the value to the utility, its customers, and society for operating distributed solar photovoltaic resources interconnected to the utility system and operated by customers primarily for meeting their own energy needs.

(b) If approved, the alternative tariff shall apply to customers' interconnections occurring after the date of approval. The alternative tariff is in lieu of the applicable rate under subdivisions 3 and 3a.

(c) The commission shall after notice and opportunity for public comment approve the alternative tariff provided the utility has demonstrated the alternative tariff:

(1) appropriately applies the methodology established by the department and approved by the commission under this subdivision;

(2) includes a mechanism to allow recovery of the cost to serve customers receiving the alternative tariff rate;

(3) charges the customer for all electricity consumed by the customer at the applicable rate schedule for sales to that class of customer;

(4) credits the customer for all electricity generated by the solar photovoltaic device at the distributed solar value rate established under this subdivision;

(5) applies the charges and credits in clauses (3) and (4) to a monthly bill that includes a provision so that the unused portion of the credit in any month or billing period shall be carried forward and credited against all charges. In the event that the customer has a positive balance after the 12-month cycle ending on the last day in February, that balance will be eliminated and the credit cycle will restart the following billing period beginning on March 1;

(6) complies with the size limits specified in subdivision 3a;

(7) complies with the interconnection requirements under section 216B.1611; and

(8) complies with the standby charge requirements in subdivision 3a, paragraph (b).

(d) A utility must provide to the customer the meter and any other equipment needed to provide service under the alternative tariff.

(e) The department must establish the distributed solar value methodology in paragraph (c), clause (1), no later than January 31, 2014. The department must submit the methodology to the commission for approval. The commission must approve, modify with the consent of the department, or disapprove the methodology within 60 days of its submission. When developing the distributed solar value methodology, the department shall consult stakeholders with experience and expertise in power systems, solar energy, and electric utility ratemaking regarding the proposed methodology, underlying assumptions, and preliminary data.

(f) The distributed solar value methodology established by the department must, at a minimum, account for the value of energy and its delivery, generation capacity, transmission capacity, transmission and distribution line losses, and environmental value. The department may, based on known and measurable evidence of the cost or benefit of solar operation to the utility, incorporate other values into the methodology, including credit for locally manufactured or assembled energy systems, systems installed at high-value locations on the distribution grid, or other factors.

(g) The credit for distributed solar value applied to alternative tariffs approved under this section shall represent the present value of the future revenue streams of the value components identified in paragraph (f).

(h) The utility shall recalculate the alternative tariff on an annual cycle, and shall file the recalculated alternative tariff with the commission for approval.

(i) Renewable energy credits for solar energy credited under this subdivision belong to the electric utility providing the credit.

(j) The commission may not authorize a utility to charge an alternative tariff rate that is lower than the utility's applicable retail rate until three years after the commission approves an alternative tariff for the utility.

(k) A utility must enter into a contract with an owner of a solar photovoltaic device receiving an alternative tariff rate under this section that has a term of at least 20 years, unless a shorter term is agreed to by the parties.

(l) An owner of a solar photovoltaic device receiving an alternative tariff rate under this section must be paid the same rate per kilowatt-hour generated each year for the term of the contract.

History: *1981 c 237 s 1; 1983 c 301 s 166-171; 1984 c 640 s 32; 1991 c 315 s 1; 1993 c 356 s 1; 1996 c 305 art 2 s 38; 2013 c 85 art 9 s 1-10; 2013 c 125 art 1 s 39; 2013 c 132 s 1*

CHAPTER 7835
PUBLIC UTILITIES COMMISSION
COGENERATION AND SMALL POWER PRODUCTION

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.

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.

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*

History: *9 SR 993*

Published Electronically: *February 28, 2000*

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.

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

History: *9 SR 993*

Published Electronically: *February 28, 2000*

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*

History: *9 SR 993*

Published Electronically: *February 28, 2000*

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*

History: *9 SR 993*

Published Electronically: *February 28, 2000*

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*

History: *9 SR 993*

Published Electronically: *February 28, 2000*

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;

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.

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*

History: *9 SR 993*

Published Electronically: *February 28, 2000*

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*

History: *9 SR 993*

Published Electronically: *February 28, 2000*

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*

History: *9 SR 993*

Published Electronically: *February 28, 2000*

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*

History: *9 SR 993*

Published Electronically: *February 28, 2000*

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*

History: *9 SR 993*

Published Electronically: *February 28, 2000*

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*

History: *9 SR 993*

Published Electronically: *February 28, 2000*

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*

History: *9 SR 993*

Published Electronically: *February 28, 2000*

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*

History: *9 SR 993*

Published Electronically: *February 28, 2000*

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*

History: *9 SR 993*

Published Electronically: *February 28, 2000*

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*

History: *9 SR 993*

Published Electronically: *February 28, 2000*

7835.1500 OTHER QUALIFYING FACILITIES.

For all qualifying facilities not 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, 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*

History: *9 SR 993*

Published Electronically: *February 28, 2000*

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*

History: *9 SR 993*

Published Electronically: *February 28, 2000*

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*

History: *9 SR 993*

Published Electronically: *February 28, 2000*

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*

History: *9 SR 993*

Published Electronically: *February 28, 2000*

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*

History: *9 SR 993*

Published Electronically: *February 28, 2000*

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*

History: *9 SR 993*

Published Electronically: *February 28, 2000*

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*

History: *9 SR 993*

Published Electronically: *February 28, 2000*

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.

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

History: *9 SR 993*

Published Electronically: *February 28, 2000*

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*

History: *9 SR 993*

Published Electronically: *February 28, 2000*

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*

History: *9 SR 993*

Published Electronically: *February 28, 2000*

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*

History: *9 SR 993*

Published Electronically: *February 28, 2000*

7835.2600 TYPES OF POWER TO BE OFFERED.

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

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

History: *9 SR 993*

Published Electronically: *February 28, 2000*

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*

History: *9 SR 993*

Published Electronically: *February 28, 2000*

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*

History: *9 SR 993*

Published Electronically: *February 28, 2000*

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

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

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

History: *9 SR 993*

Published Electronically: *February 28, 2000*

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*

History: *9 SR 993*

Published Electronically: *February 28, 2000*

7835.3100 PETITION FOR SPECIFIC SALES RATES.

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

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

History: *9 SR 993*

Published Electronically: *February 28, 2000*

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*

History: *9 SR 993*

Published Electronically: *February 28, 2000*

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*

History: *9 SR 993*

Published Electronically: *February 28, 2000*

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*

History: *9 SR 993*

Published Electronically: *February 28, 2000*

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 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*

History: *9 SR 993*

Published Electronically: *February 28, 2000*

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*

History: *9 SR 993*

Published Electronically: *February 28, 2000*

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*

History: *9 SR 993*

Published Electronically: *February 28, 2000*

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*

History: *9 SR 993*

Published Electronically: *February 28, 2000*

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*

History: *9 SR 993*

Published Electronically: *February 28, 2000*

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*

History: *9 SR 993*

Published Electronically: *February 28, 2000*

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*

History: *9 SR 993*

Published Electronically: *February 28, 2000*

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*

History: *9 SR 993*

Published Electronically: *February 28, 2000*

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*

History: *9 SR 993*

Published Electronically: *February 28, 2000*

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*

History: *9 SR 993*

Published Electronically: *February 28, 2000*

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*

History: *9 SR 993*

Published Electronically: *February 28, 2000*

7835.4550 FEES AND COSTS.

In the order resolving the dispute, the commission shall require the prevailing 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*

History: *9 SR 993*

Published Electronically: *February 28, 2000*

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*

History: *9 SR 993*

Published Electronically: *February 28, 2000*

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*

History: *9 SR 993*

Published Electronically: *February 28, 2000*

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*

History: *9 SR 993*

Published Electronically: *February 28, 2000*

7835.4900 NOTICE TO TELEPHONE, CABLE TV COMPANIES.

The electric utility must notify the appropriate telephone utility and cable 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*

History: *9 SR 993*

Published Electronically: *February 28, 2000*

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*

History: *9 SR 993*

Published Electronically: *February 28, 2000*

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*

History: *9 SR 993*

Published Electronically: *February 28, 2000*

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*

History: *9 SR 993*

Published Electronically: *February 28, 2000*

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*

History: *9 SR 993*

Published Electronically: *February 28, 2000*

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*

History: *9 SR 993*

Published Electronically: *February 28, 2000*

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*

History: *9 SR 993*

Published Electronically: *February 28, 2000*

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*

History: *9 SR 993*

Published Electronically: *February 28, 2000*

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*

History: *9 SR 993*

Published Electronically: *February 28, 2000*

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*

History: *9 SR 993*

Published Electronically: *February 28, 2000*

7835.5900 EXISTING CONTRACTS.

Any interconnection contracts executed between a utility and a qualifying facility with installed capacity of less than 40 kilowatts before November 13, 1984, 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*

History: *9 SR 993*

Published Electronically: *February 28, 2000*

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*

History: *9 SR 993*

Published Electronically: *February 28, 2000*

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*

History: *9 SR 993*

Published Electronically: *February 28, 2000*

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

THIS CONTRACT is entered into _____, ____, by _____ (hereafter called "Utility") and _____ _____ (hereafter called "QF").

RECITALS

The QF has installed electric generating facilities, consisting of _____ _____ _____ (Description of facilities), rated at less than 40 kilowatts of electricity, on property located at _____ _____.

The QF is prepared to generate electricity in parallel with the Utility.

The QF's electric generating facilities meet the requirements of the Minnesota Public Utilities Commission (hereafter called "Commission") rules on Cogeneration and Small Power Production and any technical standards for interconnection the Utility has established that are authorized by those rules.

The Utility is obligated under federal and Minnesota law to interconnect with the QF and to purchase electricity offered for sale by the QF.

A contract between the QF and the Utility is required by the Commission's rules.

AGREEMENTS

The QF and the Utility agree:

1. The Utility will sell electricity to the QF under the rate schedule in force for the class of customer to which the QF belongs.

2. The Utility will buy electricity from the QF under the current rate schedule filed with the Commission. The QF has elected the rate schedule category hereinafter indicated (select one):

____ a. Net energy billing rate under part 7835.3300.

____ b. Simultaneous purchase and sale billing rate under part 7835.3400.

____ c. Time-of-day purchase rates under part 7835.3500.

A copy of the presently filed rate schedule is attached to this contract.

3. The rates for sales and purchases of electricity may change over the time this contract is in force, due to actions of the Utility or of the Commission, and the QF and the Utility agree that sales and purchases will be made under the rates in effect each month during the time this contract is in force.

4. The Utility will compute the charges and payments for purchases and sales for each billing period. Any net credit to the QF will be made under one of the following options as chosen by the QF:

____ 1. Credit to the QF's account with the Utility.

____ 2. Paid by check to the QF within 15 days of the billing date.

5. The QF must operate its electric generating facilities within any rules, regulations, and policies adopted by the Utility not prohibited by the Commission's rules on Cogeneration and Small Power Production which provide reasonable technical connection and operating specifications for the QF. This agreement does not waive the QF's right to bring a dispute before the Commission as authorized by Minnesota Rules, parts 7835.4800, 7835.5800, and 7835.4500, and any other provision of the Commission's rules on Cogeneration and Small Power Production authorizing Commission resolution of a dispute.

6. The Utility's rules, regulations, and policies must conform to the Commission's rules on Cogeneration and Small Power Production.

7. The QF will operate its electric generating facilities so that they conform to the national, state, and local electric and safety codes, and will be responsible for the costs of conformance.

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*

History: *9 SR 993; L 1998 c 254 art 1 s 107*

Published Electronically: *February 28, 2000*

LAWS of MINNESOTA, 2015 First Special Session
Chapter 1, article 3, section 21

Sec. 21. Minnesota Statutes 2014, section 216B.164, subdivision 3, is amended to read:

Subd. 3. **Purchases; small facilities**. (a) This paragraph applies to cooperative electric associations and municipal utilities. For a qualifying facility having less than 40-kilowatt capacity, the customer shall be billed for the net energy supplied by the utility according to the applicable rate schedule for sales to that class of customer. A cooperative electric association or municipal utility may charge an additional fee to recover the fixed costs not already paid for by the customer through the customer's existing billing arrangement. Any additional charge by the utility must be reasonable and appropriate for that class of customer based on the most recent cost of service study. The cost of service study must be made available for review by a customer of the utility upon request. In the case of net input into the utility system by a qualifying facility having less than 40-kilowatt capacity, compensation to the customer shall be at a per kilowatt-hour rate determined under paragraph (c) ~~or,~~ (d), or (f).

(b) This paragraph applies to public utilities. For a qualifying facility having less than 1,000-kilowattcapacity, the customer shall be billed for the net energy supplied by the utility according to the applicable rate schedule for sales to that class of customer. In the case of net input into the utility system by a qualifying facility having: (1) more than 40-kilowatt but less than 1,000-kilowatt capacity, compensation to the customer shall be at a per kilowatt-hour rate determined under paragraph (c); or (2) less than 40-kilowattcapacity, compensation to the customer shall be at a per-kilowatt rate determined under paragraph (c) or (d).

(c) In setting rates, the commission shall consider the fixed distribution costs to the utility not otherwise accounted for in the basic monthly charge and shall ensure that the costs charged to the qualifying facility are not discriminatory in relation to the costs charged to other customers of the utility. The commission shall set the rates for net input into the utility system based on avoided costs as defined in the Code of Federal Regulations, title 18, section 292.101, paragraph (b)(6), the factors listed in Code of Federal Regulations, title 18, section 292.304, and all other relevant factors.

(d) Notwithstanding any provision in this chapter to the contrary, a qualifying facility having less than40-kilowatt capacity may elect that the compensation for net input by the qualifying facility into the utility system shall be at the average retail utility energy rate. "Average retail utility energy rate" is defined as the average of the retail energy rates, exclusive of special rates based on income, age, or energy conservation, according to the applicable rate schedule of the utility for sales to that class of customer.

(e) If the qualifying facility or net metered facility is interconnected with a nongenerating utility which has a sole source contract with a municipal power agency or a generation and transmission utility, the non-generating utility may elect to treat its purchase of any net input under this subdivision as being made on behalf of its supplier and shall be reimbursed by its supplier for any additional costs incurred in making the purchase. Qualifying facilities or net

metered facilities having less than 1,000-kilowatt capacity if inter-connected to a public utility, or less than 40-kilowatt capacity if interconnected to a cooperative electric association or municipal utility may, at the customer's option, elect to be governed by the provisions of subdivision 4.

(f) A customer with a qualifying facility or net metered facility having a capacity below 40 kilowatts that is interconnected to a cooperative electric association or a municipal utility may elect to be compensated for the customer's net input into the utility system in the form of a kilowatt-hour credit on the customer's energy bill carried forward and applied to subsequent energy bills. Any kilowatt-hour credits carried forward by the customer cancel at the end of the calendar year with no additional compensation.

EFFECTIVE DATE. This section is effective July 1, 2015, and applies to customers installing net metered systems after that day.

112
165
161

BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

Terry Hoffman	Chairman
Leo G. Adams	Commissioner
Roger L. Hanson	Commissioner
Juanita R. Satterlee	Commissioner
Lillian Warren-Lazenberry	Commissioner

In the Matter of the Proposed Adoption of Rules of the Minnesota Public Utilities Commission Governing Cogeneration and Small Power Production.

ORDER ADOPTING RULES

DOCKET NO. E-999 / R-80-560

TABLE OF CONTENTS

BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

Terry Hoffman	Chairman
Leo G. Adams	Commissioner
Roger L. Hanson	Commissioner
Juanita R. Satterlee	Commissioner
Lillian Warren-Lazenberry	Commissioner

In the Matter of the Proposed Adoption of Rules of the Minnesota Public Utilities Commission Governing Cogeneration and Small Power Production.

ORDER ADOPTING RULES

DOCKET NO. E-999 / R-80-560

PROCEDURAL HISTORY

On March 16, 1982, the Minnesota Public Utilities Commission (the Commission) initiated the public hearing portion of the administrative rulemaking process for the adoption of rules governing cogeneration and small power production by filing with the Chief Hearing Examiner the following documents:

a copy of the proposed rules (referred to throughout this Order as "the rules as initially proposed");
the Order for Hearing;
the Notice of Hearing;
a Statement of the number of persons expected to attend the public hearings and the estimated length of the Commission's presentation.

The Notice of Hearing and the proposed rules were published in the State Register on March 29, 1982, at 6 S.R. 1637.

A Revised Notice of Hearing was published on July 26, 1982, at 7 S.R. 114.

On July 30, 1982, the Commission mailed the Revised Notice of Hearing to all persons and associations who had registered their names with the Commission for the purpose of receiving such notice.

On August 12, 1982, the Commission filed the following documents with Hearing Examiner Bruce Campbell:

the Notice and Order for Hearing as mailed;
the Commission's certification that the mailing lists were accurate and complete;
an Affidavit of Mailing of the Hearing Notice to all persons registered with the Commission for the purpose of receiving such notice;
a Statement of Additional Notice as provided for in M.S. § 15.0412, subd. 4;
the Commission's Statement of Need and Reasonableness;
copies of all materials received by the Commission in response to the solicitations of outside comments made on May 5, 1980, August 11, 1980, September 29, 1980, and July 20, 1981;
the names of the Commission Staff members who would represent the Commission at the hearings, as well as any other witnesses solicited by the Commission to appear on its behalf; and
a copy of the State Register containing the proposed rules.

All materials were available for public inspection at the Office of Administrative Hearings and at the Commission's offices for at least 30 days prior to the first day of hearings.

Examiner Campbell conducted hearings on the following days at the following cities:

September 7, 1982 - St. Paul
September 8, 1982 - Mankato and Rochester
September 13, 1982 - St. Cloud and Duluth
September 14, 1982 - Grand Rapids and International Falls
September 15, 1982 - Crookston
September 16, 1982 - Fergus Falls
September 17, 1982 - Pipestone

Three-hundred-eleven people signed the hearing registers at the various hearings. One-hundred-thirty-four public witnesses appeared and spoke at the hearings. The Commission was represented by Stuart Mitchell, Paul Schweizer, and Howard Swanson, all members of its Staff, and by Karl Sonneman, Special Assistant Attorney General. No witnesses outside the agency were solicited by the Commission to appear on its behalf. The Commision submitted written exhibits numbered Agency Exhibits A through J by the Examiner. One-hundred-nineteen timely filed written exhibits were received from members of the public.

Examiner Campbell extended the period during which the record remained open for 20 calendar days after the date of the final hearing. The Commission submitted revised proposed rules (referred to throughout this Order as "the rules as finally proposed") and Comments to the Examiner on October 7, 1982, and the Examiner closed the record on that date.

The Chief Hearing Examiner extended the time for filing of the Examiner's Report, and Examiner Campbell submitted his Report to the Chief Hearing Examiner on December 30, 1982.

Chief Hearing Examiner Duane Harves issued his Report approving Examiner Campbell's Report in all respects, and specifically as to any finding of substantial change or of failure to comply with M.S. § 15.0412, subd. 4-4f, or of failure to establish the need for or reasonableness of the proposed rules, on January 3, 1983.

The Commission has waited at least five working days following the issuance of the Hearing Examiner's and Chief Hearing Examiner's Reports before taking any final action on the proposed rules, and has made copies of those Reports available to all interested persons upon request.

Now, upon review of all the records herein, and after considered deliberation thereupon, the Commission makes the following Findings, Conclusions, and Order.

FINDINGS OF FACT AND CONCLUSIONS OF LAW

I. PROCEDURAL REQUIREMENTS OF LAW.

The Commission finds that it has wholly and adequately complied with the procedural requirements of the Minnesota Administrative Procedure Act relating to the adoption of controversial administrative rules, M.S. § 14.13-14.20, and concludes that it may now act to adopt the proposed rules.

II. ADOPTED RULES.

4 MCAR § 3.0450. Scope and purpose.

In the Statement of Need and Reasonableness (the Statement) the Commission discussed the need for and reasonableness of this section as follows:

> In the 1981 session, the Minnesota Legislature added a new section to the Public Utilities Act. That section, codified as M.S. § 216B.164, established a statutory framework for the development of cogeneration and small power production in Minnesota. M.S. § 216B.164 sets forth certain specific standards for utility purchases of the output of cogeneration and small power production facilities (subd. 3), for wheeling of that power among small power production facilities (subd. 3), for wheeling of that power among utilities (subd. 4), for resolution of disputes (subd. 5), for reports to the Legislature (subd. 7), and for the treatment of certain costs (subd. 8). In addition, M.S. § 216B.164, subd. 6 states, "the [Public Utilities] Commission shall promulgate rules to implement the provisions of this section." These proposed rules are designed to comply with the directive of M.S. § 216B.164, subd. 6.
>
> The Commission has general rulemaking authority under M.S. § 216A.05, subd. 1. In addition, the Commission is empowered to regulate public utilities generally under M.S. § 216B.08. That regulation extends to setting reasonable rates (M.S. §§ 216B.03 and 216B.16), ensuring that utilities provide safe, adequate, efficient, and reasonable service

(M.S. § 216B.04), prohibiting unreasonable preferences, advantages, prejudices, or disadvantages through utility rates or services (M.S. § 216B.07), and fixing just and reasonable standards, regulations, and practices for public utilities (M.S. § 216B.09). In addition, the Commission has been granted investigatory (M.S. § 216B.14) and complaint authority (M.S. § 216B.17).

As part of the National Energy Act of 1978, the United States Congress passed the Public Utility Regulatory Policies Act (PURPA), Pub. L. 95-617. A portion of PURPA, codified as 16 U.S.C. § 843a-3, amends the Federal Power Act and governs cogeneration and small power production. 16 USC § 843a-3(a) requires the Federal Energy Regulatory Commission (FERC) to promulgate rules as necessary to encourage cogeneration and small power production, which rules are to require electric utilities to offer to sell electric energy to and purchase electric energy from cogeneration and small power production facilities. 16 USC § 824a-3(f) requires state regulatory authorities (including the Commission) to implement the cogeneration and small power production rules which the FERC promulgates under PURPA.

The FERC subsequently put rules into place which implemented the cogeneration provisions of PURPA. 18 CFR § 292.401 requires state regulatory authorities, not later than one year after the FERC rules take effect, to commence implementation of 18 CFR §§ 292.301 and 292.303-.308. The FERC indicated that the state implementation could be by the issuance of regulations, by resolution of disputes between utilities and qualifying facilities, or by any other action reasonably designed to implement the FERC.

The proposed rules are thus generally necessary to comply with the direction of M.S. § 216B.164, subd. 6, as well as to fulfill the Commission's obligations under Federal law and FERC regulations. As will be discussed hereinafter, the provisions of the proposed rules are reasonable to carry out the intent of the state and federal legislation and regulations.

M.S. § 216B.164, subd. 1, states, "This section shall at all times be construed 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." The Commission has adopted the identical standard as the general intent of the proposed rules. The Commission believes it is necessary to be consistent with state law, and is reasonable to adopt the clear and unambiguous statutory language.

The Commission considers the inclusion of a Scope and Purpose section to be of importance. It is recognized that the proposed rules are complex. This section is intended to act as an introductory section to assist the reader in determining the origin, the general purposes and intent of the rules, as well as their overall effect.

The Commission further discussed the statutory restatement in its October 7 Comments to the Examiner (the Comments) as follows:

The scope and purpose section of the proposed rules contains, in its last sentence, a restatement of a portion of M.S. § 216B.164, subd. 1, " . . . intent to give the maximum possible encouragement to cogeneration and small power production consistent with protection of the ratepayers and the public."

M.S. § 15.0412, subd. 1, states "No agency shall adopt a rule which duplicates language contained in Minnesota Statutes unless the hearing examiner . . . determines that duplication of the language is crucial to the ability of a person affected by the rule to comprehend its meaning and effect. When presented with a rule for certification pursuant to subdivision 2a, the revisor of statutes should indicate in the certification that the rule duplicates statutory language."

In a letter dated March 15, 1982, the revisor approved the proposed rules for publication in the State Register. The form upon which the revisor indicated approval as to the form of the rules contained a space for notation of any statutory language duplication. None was noted. The Commission concludes that the revisor does not consider the restatement of 22 words found in Minnesota Statutes to be a duplication of statutory language within the meaning of M.S. § 15.0412, subd. 1.

Even if the restatement is a duplication, the Commission recommends that the Examiner find that the duplication is necessary. The Legislature has stated the public policy of the state in regard to cogeneration, but it is unlikely that many persons affected by the proposed rules will read M.S. § 216B.164. To clearly explain the intent of the rules, a corresponding statement of the overall policy of encouragement and protection is crucial to an understanding of the rules.

The Hearing Examiner found that the inclusion of a scope and purpose section in the proposed rules is both necessary and reasonable, and further found that the duplication of the statutory language is critical to the ability of a person affected by the rule to comprehend its meaning and effect.

The Commission has made only a technical change to the text of this section as finally proposed, which is to alter the internal references to rule numbers to recognize the deletion of 4 MCAR § 3.0463.

The Commission adopts the findings of the Examiner, and concludes that the need for and reasonableness of this section has been adequately demonstrated.

4 MCAR § 3.0451 Definitions.

A. Applicability.

This subsection has no substantive effect.

B. Average annual fuel savings.

In the Statement, the Commission discussed the need for and reasonableness of this definition as follows:

> This term is defined so it may be used in the calculation of avoided costs. It is applicable to a utility which intends to build new generating capacity.
>
> One reason for building new capacity is to reduce system fuel costs. This can happen, for example, when a baseload unit replaces a peaking unit or purchased power in providing large amounts of electric energy. It can also happen when a new, efficient unit replaces an old, inefficient unit. The definition reasonably calls for a comparison of the system fuel costs to meet the expected annual load with and without the planned new unit. The difference is the average annual fuel savings.

The Hearing Examiner reported that this definition received no comments at the hearings or in the exhibits. He found it was adequately supported by the Statement as to need and reasonableness.

The Commission adopts the Examiner's findings, and concludes that the need for and reasonableness of this definition have been adequately demonstrated by the Statement.

C. Backup power.

The Commission's discussion of this definition in tne Statement was as follows:

> This definition and the definitions for Interruptible power, Maintenance power and Standby power, are necessary because they are used in the rule to indicate which types of power are to be offered by the utility. The definitions are reasonable because they are consistent with standard industry usage of the terms. Furthermore, the four definitions correspond with the four classifications of power to be sold to qualifying facilities as established by the FERC. The rule appropriately distinguishes each type of power from the others. This is necessary because the cost of providing one type may differ from the cost of providing another. For example, a utility supplying Interruptible power may curtail sales to the qualifying facility at the time of system peak, and in so doing may

conserve capacity and reduce capacity costs. In contrast, a utility supplying Backup power must allow for the possibility that the qualifying facility will suddenly begin to take power at the time of system peak, and it must incur some of the cost consequences of this contingency even if no power is actually drawn. It may be possible for a qualifying facility to arrange scheduled maintenance to coincide with a time when the utility has excess reserves; if so, the cost of providing it as Maintenance power (and its price to the qualifying facility) may be low. Likewise, Supplementary power, which is routinely provided to the qualifying facility, carries its own distinct cost consequences. The cost differences, therefore, make it necessary to establish these classifications and demonstrate their reasonableness.

The definition of each type of power is reasonable in that it is consistent in meaning and application with the FERC rules. Such consistency will tend to avoid confusion and ambiguity. It will also promote harmony between the State and Federal rules thus alleviating the burdens of interpreting conflicting or inconsistent provisions by interested persons. By reducing confusion and ambiguity, a more favorable climate is established for encouraging cogeneration and small power production.

The Examiner reported that there were no comments on this definition, apart from the Commission's, on the record. He found it was adequately supported by the Statement as to need and reasonableness.

The Commission adopts the Examiner's findings, and concludes that the need for and reasonableness of this definition have been adequately demonstrated by the Statement.

D. Capacity.

The Commission discussed the need for and reasonableness of this definition in the Statement as follows:

> Capacity is one of two elements (the other is energy) which together make up electric service. It is necessary to define capacity because qualifying facilities may enable a utility to avoid acquiring capacity of its own. If they do, they are eligible for compensation. The definition is reasonable in that it is consistent with general use of the term in the electric utility industry.

The Examiner found no comments on the definition, either at the hearings or in the exhibits, and he found the need for and reasonableness of the rule were adequately supported by the Statement.

The Commission adopts the Examiner's findings, and concludes that the need for and reasonableness of this definition have been adequately demonstrated by the Statement.

E. Capacity costs.

The Statement contained the following discussion of this definition:

> A definition of capacity costs is needed because qualifying facilities which provide capacity to utilities are entitled to be paid the costs of the capacity avoided by the utilities. The definition is reasonable because it is consistent with the general use of the term in the electric utility industry.

There were no comments on this definition, either at the hearings or within the exhibits. The Examiner found that need and reasonableness were adequately supported by the Statement.

The Commission adopts the Examiner's findings, and concludes that the need for and reasonableness of this definition have been adequately demonstrated by the Statement.

F. Commission.

The Commission noted in the Statement that this definition was self-explanatory. The Examiner reported that there were no comments on this definition at the hearings or in the exhibits. He found it was adequately supported, as to need and reasonableness, by the Statement.

The Commission adopts the Examiner's findings, and concludes that the need for and reasonableness of this definition have been adequately demonstrated by the Statement.

G. Energy.

The Statement contained the following discussion of this definition:

> It is necessary to define energy because qualifying facilities are to be compensated for energy supplied to utilities. The definition is reasonable because it includes electric energy and excludes all other forms of energy. The utility is only required to purchase electric energy.

The Examiner reported receiving no comments on this definition at the hearings or in the exhibits. He found it was adequately supported for need and reasonableness by the Statement.

The Commission adopts the Examiner's findings, and concludes that the need for and reasonableness of this definition have been demonstrated by the Statement.

H. Energy costs.

The Commission included the following discussion of this definition in the Statement.

> Energy costs must be defined because compensation to qualifying facilities for energy they supply is based on the costs utilities would incur if qualifying facilities did not supply them. Those costs are energy costs. The definition is reasonable because it is consistent with the way the term is used generally in the electric utility industry.

The Examiner reported that no comments on this definition were received, either at the hearings or in the exhibits. He found that the Statement adequately supported the need for and reasonableness of this definition.

The Commission adopts the Examiner's findings, and concludes that the need for and reasonableness of this definition have been demonstrated by the Statement.

I. Firm power.

This definition was proposed by the Commission in response to comments received at the hearings. The Commission discussed the need for and reasonableness of this definition in the Comments, as follows:

> The Commission received several comments that a definition for firm power is needed. The recommended definition is responsive to those comments. It is necessary to define firm power because it is used to determine whether or not a qualifying facility with capacity of more than 100 kilowatts is eligible for standard rates. The proposed definition is essentially the same as the definition recommended by Northern States Power Company. The requirement that energy be provided with at least a 65 percent on-peak capacity factor is reasonable because it specifies a level of capacity that a qualifying facility, with suitable equipment, could reasonably be expected to maintain.

The Examiner's Report contained the following discussion of the definition:

> Section 3.0451 I. defines "Firm power" in terms of a 65% on-peak capacity factor in a given month. The rules, as initially drafted and submitted, contained no definition of Firm power even though the specific term was used in the rules. A definition of Firm power is necessary because the term is used in the rules to determine whether or not a QF with a capacity of more than 100 kilowatts is eligible for standard rates. Although the Commission adduced no independent facts of the reasonableness of the 65% on-peak capacity factor used

in the definition, a number of public witnesses supplied testimony substantiating the reasonableness of the criteria ultimately adopted by the Commission. For example, Interstate Power Company testified that the Company's system capacity factor is about 65% and should likewise be achieved by a QF to rate an avoided capacity cost payment in a billing month. (Pub. Ex. 88, Interstate Power Co., p. 3). Northern States Power Company testified that a 65% capacity factor is a realistic industry standard based primarily on its own experience. (Pub. Ex. 118, NSP Reply Comments, p. 1). Moreover, a 65% capacity factor reflects the expected performance of NSP's next proposed generating unit, Sherburne County Unit 3. (Pub. Ex. 118, NSP Reply Comments, p. 1). The MMUA also suggested the adoption of a definition of Firm power utilizing a 65% capacity factor is comporting with the experience of municipal electric utilities. (Pub. Ex. 117, MMUA Posthearing Statement, p. 8). Finally, the County of Hennepin testified that an appropriate factor would be less than the 70% factor suggested by the Minnesota Energy Agency in respect to hydroelectric facilities. (Pub. Ex. 106, County of Hennepin, p. 3). There is no support in the record for a definition of Firm power other than the 65% capacity factor ultimately accepted by the Commission. Therefore, the definition of Firm power is both necessary and reasonable.

The addition of the definition of Firm power does not constitute a substantial change within the meaning of 9 MCAR § 2.111 so as to require additional notice and hearings. The term "Firm power" was used in the rules as initially proposed. All participants in the hearing were apprised of its presence in the proposed rules and had an opportunity to comment thereon. The addition of the definition, in fact, was in specific reaction to the comments from affected public witnesses. Finally, that portion of the proposed rules relative to the rate for the supplying of Firm power would, in itself, be unreasonable without an appropriate definition of the term.

The Commission adopts the Examiner's findings. It concludes that the need for and reasonableness of this definition have been demonstrated, and that the addition of this definition does not constitute a substantial change within the meaning of 9 MCAR § 2.111.

J. Generating utility.

P. Nongenerating utility.

These definitions were proposed by the Commission as a result of the hearings. The Commission included the following discussion of the need for and reasonableness of these definitions in the Comments:

The Commission recommends adding the two definitions above to its proposed rules. It is necessary to distinguish generating utilities from non-generating utilities both because the nature of their avoided costs may be different and because the proposed rules require different actions of the two kinds of utilities. Testimony at the public hearings revealed a need for definitions to enable interested persons, particularly utilities, to make that distinction to comply with the rules.

The definitions proposed are reasonable because they make the distinction not on the basis of installed capacity, but on the basis of whether the utility schedules the use of the capacity to meet its own needs. This focuses the distinction on the crucial matter of avoided costs. If the utility schedules the capacity to meet its own needs, the use of the capacity, and therefore the costs of operating it, can be avoided through the provision of power by qualifying facilities. Under the proposed definitions, this utility would be classified as a generating utility. In contrast, a utility which owns generating facilities but operates them only for emergencies or to maintain them in operational readiness, is unable to avoid those operating costs. Similarly, a utility whose generating facilities are dispatched by another organization cannot directly avoid these costs. These utilities are, therefore, reasonably classified for the purposes of these rules as non-generating utilities. It should be noted that the recommended definitions are consistent with the interpretations of generating and non-generating utilities made by Commission staff during the hearings. Those interpretations were not criticized.

The Examiner found the addition of these definitions to be appropriate:

> Sections 3.0451 J. and P. are the definitions of the terms "Generating utility" and Non-generating utility". Such definitions were not contained in the rules as initially proposed. Definitions of the terms are necessary to distinguish generating utilities from non-generating utilities because the nature of their avoided costs may be different and the proposed rules require different actions from the two kinds of utilities. (Agency Ex. J, Reply Comments, p. 3). Testimony at the public hearings revealed a need for such definitions to enable interested persons to comply with the provisions of the proposed rules. The definitions ultimately proposed by the Commission are in accordance with the testimony of a number of public witnesses. The definitions proposed are reasonable because they make a distinction not on the basis of installed capacity but on the basis of the ability of the utility to use capacity to meet its own needs. This distinction focuses specifically on the matter of avoided costs, the basis for certain of the rate calculations. No public comments were received suggesting a definition of the two terms materially different than that ultimately proposed by the Commission. Moreover, the Commission Staff's explanation of the terms during the hearings, even though the terms were not then included in the proposed rules, engendered no adverse comments from public witnesses. The Hearing Examiner concludes that the definitions of Generating utility and Non-generating utility are necessary and reasonable.
>
> The addition of definitions of the two terms does not result in a substantial change within the meaning of 9 MCAR § 2.111. Distinctions in the proposed rules were made on the basis of a utility being a non-generating utility. The rules as initially proposed, however, contained no definition of that term and its cognate term "Generating utility". Participants in the public hearings were adequately apprised both by the rules as proposed, and by discussion at the various public hearings that a definition of generating and non-generating utilities would be appropriate. In fact, the definitions have been proposed in response to public comments. Finally, since the terms "Generating utility" and "Non-generating utility" were employed in the rules as initially drafted without definition, the insertion in the rules as finally proposed of appropriate definitions merely avoids what would otherwise be a defect in the proposed rules.

The Commission adopts the Examiner's findings. It concludes that the need for and reasonableness of these definitions have been adequately demonstrated, and that the addition of these definitions does not constitute a substantial change within the meaning of 9 MCAR § 2.111.

K. Incremental cost of capital.

The Commission added this definition as a result of the hearings. The Comments said:

> The Commission recommends adding this definition in conjunction with a proposed change in the present value computations required in Schedule B (4 MCAR § 3.0452 C.). In that change, the Commission recommends substituting the incremental cost of capital for the most recently authorized overall rate of return as the discount rate to be used. The incremental cost of capital is the more appropriate value because it is more reflective of costs which would actually be either incurred or avoided. The incremental cost of capital definition reasonably uses the current costs of all kinds of capital employed by the utility to determine the overall cost rate which is then used to discount future values to their present value.

In approving the addition of this definition, the Examiner said:

> Section 3.0451 K. defines "Incremental costs of capital" in terms of the current weighted cost of the components of a utility's capital structure. A definition of the term is necessary because of a proposed change in the present value computations required in

Schedule B as described in § 3.0452 C. of the proposed rules. The definition is reasonable because it fully complies with the common usage of the term in both the Commission's rate regulation experience and industry practice. The definition reasonably uses the current costs of all kinds of capital employed by the utility to determine the overall cost rate which is then used to discount future values to their present value. Hence, the definition of Incremental costs of capital is both necessary and reasonable.

The addition of the definition of Incremental cost of capital does not constitute a substantial change within the meaning of 9 MCAR § 2.111.

The Commission adopts the Examiner's findings, and concludes that the need for and reasonableness of the definition have been adequately demonstrated. In addition, the Commission concludes that the addition of this definition does not constitute a substantial change within the meaning of 9 MCAR § 2.111.

L. Interconnection costs.

The need for and reasonableness of this definition were set forth by the Commission in the Statement as follows:

> It is necessary to define interconnection costs because these costs are explicitly assigned to qualifying facilities by both the FERC rules (18 CFR § 292.101 (b) (7) and Minnesota Law (M.S. § 2168.164, subd. 8). Interconnection costs are costs which would not be incurred if the utility did not engage in interconnected operations with cogenerators and small power producers. The definition above is reasonable. Except for the last sentence, it is substantially the FERC definition, with only minor wording changes. The Commission has added the provision that only costs in excess of the costs of connecting nongenerating customers of the same class be considered interconnection costs. This provision is necessary and reasonable because often part or all of the costs it excludes are recovered by the utility in fixed charges as part of retail rates. Under Minnesota law and these rules, qualifying facilities must pay any fixed charges in the tariff under which they consume electricity. Therefore, without this provision, the qualifying facility could be discriminated against relative to other members of its class. Both the discrimination and the result of paying the utility twice for the same costs would be unreasonable.

The Examiner found this definition to be both necessary and reasonable. He said:

> Section 3.0451 L. defines "Interconnection costs" as the reasonable costs incurred by the utility directly related to the interconnected activities of the QF to the extent that they are extra costs incurred by the utility as a result of the interconnected operations of the QF. A definition of Interconnection costs is necessary since the phrase is used in § 3.0454 G. of the proposed rules. Such interconnection costs are also explicitly assigned to QFs by both the FERC Rules, 18 C.F.R. § 292.101(b)(7), and Minn. Stat. § 216B.164, subd. 8 (1981 Supp.). The proposed definition of Interconnection costs is reasonable since it defines as such a cost the added expense to a utility resulting from interconnected activities with a QF. Moreover, except for the last sentence of the definition, it fully comports with the FERC definition.
>
> The final sentence of the definition, which has no cognate FERC provision, is necessary and reasonable because part or all of the costs excluded as interconnection costs by the last sentence of the definition are recoverable by a utility in fixed charges as part of its retail rates under Minnesota law and the proposed rules. A QF must pay any fixed charges in the utility's tariff under which it consumes electricity. Without the final exclusionary sentence of the definition, the QF could be discriminated against relative to other members of its class. Both the resulting discrimination and double payment for the same costs to the utility would be unreasonable.

Only two public comments on the proposed definition of interconnection costs were received. Northern States Power Company suggests adding the word "existing" prior to the word "non-generating" and the word "retail" prior to the word "customer" in the third sentence of the definition. The proposed language of Northern States Power Company, however, does not clarify the rule and, in fact, introduces ambiguity. If the word "existing" is added to modify the word "customer", arguably the costs associated with providing electric service from the utility to the QF would be an interconnection cost, even though the cost would be one common to any other non-generating customer. Further, any cost associated with the provision of electric service to an new QF would not be a cost that would be incurred by an existing non-generating customer. Jacobs Wind Electric Co. proposes to add additional language to the definition limiting Interconnection costs to those specifically provided for by the proposed rules. (see, Publ Ex. 16, Jacobs Wind Electric Co., p. 4). Since it would be virtually impossible and entirely impractical to detail in these rules each specific cost that may be legitimately occasioned by interconnection, the addition of the language suggested by Jacobs Wind Electric Company is inappropriate.

The Commission adopts the Examiner's findings, and concludes that the definition has been adequately demonstrated to be needed and reasonable.

M. Interruptible power.

This definition has been clarified in response to the Hearing Examiner's concerns.

As initially proposed, the justification for this definition appeared in the Statement along with discussions of "backup power", "maintenance power", and "supplementary power" (see the discussion of 4 MCAR § 3.0451.C., above).

The Examiner found the proposed definition to be needed, but impermissibly vague:

Section 3.0451 M. defines "Interruptible power" as electric energy or capacity supplied by the utility to a qualifying facility subject to interruption under certain specified conditions. A definition of Interruptible power is necessary because it is used in the proposed rules to indicate which types of power are to be offered by a utility. The Commission in its Statement of Need and Reasonableness asserts that the definition is reasonable because it fully comports with the federal definition of the term in the FERC Rules and is consistent with standard industry usage. (Statement of Need and Reasonableness, p. 3). As Jacobs Wind Electric Company points out, however, it is not clear from the definition whether the phrase "under certain specified conditions" relates to conditions peculiar to a QF or to conditions that would affect retail customers of the same class generally. (See, Pub. Ex. 16, Jacobs Wind Electric Co., p. 4) The phrase "under certain specified conditions" is impermissibly vague. The rules do not define the "specified conditions" under which the power may be interrupted. Further, there is no indication in the rules as proposed of who is to specify the conditions for interruption and in what manner such conditions are to be enumerated.

Since the definition proposed by the Commission is, in fact, a FERC definition, the Hearing Examiner has reviewed Agency Ex. I, the explanation of the FERC Rules, without any clarification of the definition. Several constructions of the proposed definition are possible. The initial construction is that Interruptible power must be made available to a QF on the same conditions that such power is made available to any other retail customer. The second construction of the definition is that power may be interrupted to a QF under conditions specified in the interconnection contract in situations peculiar to a QF. Therefore, since the Hearing Examiner is unable to determine which is the appropriate construction of the proposed definition, the Commission has failed to substantiate the reasonableness of the proposed definition by an affirmative presentation of facts.

The Examiner went on to say that the defect could be corrected by clarifying the language of the definition so that the proper construction was evident.

The Commission has followed the Examiner's recommendation in the rule as adopted. The definition now unambiguously represents his "initial construction" - that is, that the availability and conditions of interruptible power do not permit discrimination between qualifying facilities and non-generating utility customers with similar usage.

The Commission observes that interruptible power is an alternative to firm power which a customer may choose. It offers advantages: to the customer, a reduced price; to the utility, lower costs to provide service. The cost of providing interruptible service might vary by customer class within a utility, but would not vary depending upon whether the customer can generate electricity. Consequently, it would be unreasonable to permit different treatment of qualifying facilities and non-generating customers with similar usage characteristics. For this reason, it has been the Commission's intention since proposing the definition that it be interpreted in conformance with the Examiner's "initial construction."

The Commission finds that the language clarification in the rule as adopted removes the Examiner's objection that the definition was impermissibly vague. The Commission concludes that the need for and reasonableness of the definition have been adequately demonstrated. The Commission also concludes that the addition of language which clarifies the original intent of this definition does not constitute a substantial change within the meaning of 9 MCAR § 2.111.

N. Maintenance power.

The Commission's discussion of the need for and reasonableness of this definition appeared in the Statement under the definition of "Backup power"; it may be found in the same location in this Order.

The Examiner reported that no comments were submitted either at the hearings or within the exhibits with respect to this definition. He found that the definition was both necessary and reasonable on the record.

The Commission adopts the Examiner's findings, and concludes that the need for and reasonableness of this definition have been adequately demonstrated by the Statement.

O. Marginal capital carrying charge rate in the first year of investment.

In the rules as initially proposed, the marginal capital carrying charge rate was applied to the cost of a new generating plant to determine the capital cost that would be avoided in that year by the utility. This carrying charge rate was designed to include all the costs associated with owning a new generation plant for a one-year period.

This aspect of the proposed rules was criticized by several utilities. Although the calculation of the marginal capital carrying charge rate itself was not attacked, the result of applying this carrying charge rate to the cost of a new generation plant was. These utilities claimed that the resulting capacity rates would exceed avoided costs because the ever-escalating cost of new generating plants would push the capacity cost payments to qualifying facilities higher each year. This is wrong, they argued, because the cost of the plant that would have been built would remain constant for the life of the plant.

The Commission notes that the problem which the utilities have identified is due solely to the phenomenon of inflation. They are assuming that inflation will push the cost of generating plants ever higher.

The utilities proposed that each qualifying facility be locked in to a payment based upon the cost of the plant that would have been built that year. This proposed solution is inappropriate because it would result in discriminatory treatment to qualifying facilities based upon the year that they began selling power to the utility. Such a vintaging of rates would be improper because it would imply that the value of power delivered to the utility system is different for different qualifying facilities, depending upon the year in which each began selling power. In fact, the value of power is the same, assuming it is delivered in like amounts at comparable quality levels at similar hours of the day.

In addition, the Commission believes that due to inflation, it is appropriate that the capacity payments to qualifying facilities escalate each year. Escalation of rates is necessary in order to maintain the purchasing power of the monies paid to qualifying facilities. These escalating payments should match the escalating avoided costs faced by the utility.

In the rules as finally proposed, the Commission appropriately addresses the inflation-related problem uncovered by the utilities. The rules as finally proposed require an explicit adjustment to the marginal carrying cost of capital to reflect the effects of inflation on the utility's carrying cost of capital.

Because inflation is pushing the cost of generation plants ever higher, the utilities benefit from building a plant this year instead of next year. The appropriate solution is to reflect the benefit of cost saved by building a plant one year earlier as a reduction to the carrying charge rate associated with owning this plant. In other words, the marginal capital carrying charge rate must be adjusted to recognize the fact that although the utility incurs costs when it builds and owns a generating plant this year (equal to the levelized marginal capital carrying charge rate), it also saves an amount equal to the difference between the cost of building the plant this year and building the plant next year. Consequently, the marginal capital carrying charge rate must be adjusted for inflation, in order to show the true cost associated with building and owning a plant this year, or conversely, the cost avoided by not having to build and own a generation plant this year. Since the utility would save money by building the plant this year rather than next year, the inflation adjustment is a downward adjustment to the marginal capital carrying charge rate.

The Hearing Examiner agreed with the reasoning of the Commission, found that the record contained no testimony contrary to the definition ultimately proposed by the Commission, and found the definition as finally proposed to be reasonable, and found that the definition as finally proposed did not contain a substantial change.

The Commission adopts the definition as finally proposed and finds that the need for and reasonableness of it has been shown, and that it does not result in a substantial change.

Q. On-peak hours.

The Commission's Statement contained the following discussion of this definition:

> A definition of on-peak hours is needed because utility costs, and utility avoidable costs, vary between on-peak hours and off-peak hours. Since compensation to qualifying facilities is based on costs utilities can avoid, it is essential to have some determination of which hours are on-peak.
>
> The proposed definition accepts determinations of on-peak periods made by the Commission or by the utility when the utility has defined on-peak hours for ratemaking. Since many utilities have already determined on-peak and off-peak periods, this will tend to eliminate duplication of work on the part of the utility and will provide for appropriate time periods because existing rates and rating periods can be presumed to be reasonable. At the same time, a non-regulated utility that has not yet designated on-peak periods may choose to examine its load characteristics and determine which hours will most appropriately be included in the on-peak hours. If such a utility is unable or unwilling to perform a comprehensive and possibly time consuming examination, the rule provides for a simple method to determine on-peak periods which will minimize the amount of analysis required and at the same time will produce on-peak periods which will span the hours during which the utility is most likely to experience its system peak. A rule of thumb such as the 85 percent rule of thumb employed in the rule was used to establish on-peak periods for at least two of the utilities regulated by the Commission (i.e., Minnesota Power and Light Company, Docket No. E-015/GR-80-76 and Interstate Power Company, Docket No. E-001/GR-78-1065).
>
> Thus, this general approach has been relied upon for larger utilities and there is no reason to believe that this approach would not be reliable when applied by smaller utilities. Based upon its experience, the Commission has determined that an 85 percent level

would be appropriate because it would provide an additional level of certainty that the peak demand experienced by the utility would fall in the on-peak period. Consequently, the proposed definition is reasonable.

The Examiner reported receiving no comments about this definition. He found that the need for and reasonableness of this definition had been adequately supported by the Statement.

The Commission adopts the Examiner's findings, and concludes that the need for and reasonableness of this definition have been adequately demonstrated by the Statement.

R. Purchase. See discussion under "T. Sale."

S. Qualifying facility.

The Commission has made one technical revision in this definition between the rules as initially proposed and the rules as adopted. That revision changed the reference to the rules from "4 MCAR §§ 3.0450-3.0463" to "4 MCAR §§ 3.0450 - 3.0462." The revision is necessary because the Commission is not adopting the last of the initially proposed rules.

With respect to the substance of this definition, the Statement contained the followinng discussion:

> A definition of qualifying facilities is necessary because these rules are all about interconnections between qualifying facilities and utilities. Section 201 of PURPA amended Section 3 of the Federal Power Act to add definitions of, among other things, small power production facilities and cogeneration facilities. It also required the FERC to promulgate rules further defining qualifying small power production facilities and qualifying cogeneration facilities. The cites in the proposed definition are to the FERC rules defining qualifying facilities. It is reasonable to use the FERC definjtions, since the FERC rules were based on extensive public participation and apply nationally. Furthermore, all persons commenting to the Commission during the solicitations of comment and opinion which underlie these proposed rules assumed the Commission's definition would correspond with the FERC's.
>
> There is nevertheless one difference between the two definitions. In promulgating its rules, the FERC reasoned that facilities already in existence did not need the incentive of PURPA and its rules; they were already engaged in cogeneration or small power production. Consequently, the FERC authorized State regulatory authorities to treat such facilities differently (and less favorably) than qualifying facilities coming on line, presumably, because of the incentives of PURPA and the FERC rules. In proposing this definition, the Commission determined it would be unreasonable to take advantage of such authority. As a practical matter, the Commission would have to determine that a rate lower than that applicable to other qualifying facilities was nevertheless sufficient to encourage cogeneration and small power production. Making such a determination would likely be time consuming and not cost beneficial. As a matter of equity, the Commission thinks it would be unreasonable to provide less compensation to one of two facilities, each of which allowed the utility to avoid similar costs, simply because that facility was in operation or had been installed prior to some arbitrary date.
>
> The Examiner discussed this definition as follows:
>
> Section 3.0451 S. defines "Qualifying facility" in accordance with both the FERC and Minnesota statutory definition. The Commission has added a second sentence to the definition stating that a cogeneration or small power production facility installed prior to the passage of both PURPA and Minn. Stat. § 216B.164 (1981 Supp.), may still be considered a Qualifying facility within the provisions of the proposed rules. In that regard, the definition of Qualifying facility contained in the proposed rules deviates from the FERC definition. Under the FERC Rules, a cogeneration or small power production facility operational prior to the effective date of PURPA is not considered a Qualifying Facility.

A definition of the term "Qualifying facility" is necessary because the term is used specifically throughout the rules and is a condition on the type of facility entitled to the benefit of the rules. The initial sentence of the definition is reasonable since it exactly parallels the statutory definition. (See, Minn. Stat. § 216B.164, subd. 2 (1981 Supp.)). The statute, however, is silent on the question of whether a cogeneration or small power production facility interconnected prior to the adoption of both PURPA and the Minnesota statute may be considered a Qualifying facility for purposes of the proposed rules. The Commission asserts that it would be unreasonable to distinguish between cogeneration and small power production facilities based on their date of interconnection. (Statement of Need and Reasonableness, p. 6). To make such a distinction, the Commission would have to determine in an individual contested case proceeding that a rate lower than that allowed to other QFs would be sufficient nevertheless to encourage cogeneration and small power production. Making such a determination would be time consuming and not cost-beneficial. The Commission further argues that the avoided costs resulting from the interconnection of a QF are the same irrespective of the in-service date of the facility. Hence, it is argued that to distinguish between QFs on the basis of their interconnection date would be inequitable.

A number of witnesses testified that the purpose of both PURPA and the state statute is to encourage cogeneration. Presumably, QFs that were in service prior to the effective date of PURPA and the Minnesota statute would not require enhanced rates because they were interconnected without benefit of such advantages. (See, Pub. Ex. 6, NSP, p. 4; Pub. Ex. 65, Ottertail Power Company; Pub. Ex. 88, Interstate Power Company, p. 2; and Pub. Ex. 118, NSP Reply Comments, p. 3).

A number of witnesses, including existing cogenerators, supported the definition as proposed. (See, e.g., Pub. Ex. 53, Boise-Cascade Company, p. 1; Pub. Ex. 110, Department of Public Service).

The Hearing Examiner accepts the rationale of the Commission regarding the reasonableness of extending the benefits of the rules to all cogeneration and small power production facilities irrespective of their in-service date. The Hearing Examiner believes that, as a matter of practicality and equity, all cogeneration and small power production facilities should obtain the benefits of the proposed rules. Moreover, the argument that the existing cogenerators do not need the stimulus of the rules is not supported adequately by the record. Existing cogenerators and small power producers, irrespective of their in-service dates, could benefit from the proposed rules by maintaining the viability of their facilities, engaging in necessary repair and/or expansion of existing facilities, and the establishment of additional QFs. The definition as proposed by the Commission is both necessary and reasonable.

The Commission adopts the Examiner's findings, and concludes that the need for and reasonableness of this definition has been adequately demonstrated.

T. Sale.

These two definitions were included in the rules to clarify the perspective from which "purchases" and "sales" were to be viewed. Like the definition of Commission, these were described in the Statement as self-explanatory.

The Examiner reported receiving no comments about these definitions. He found that the need for and reasonableness of these definitions had been adequately supported.

The Commission adopts the Examiner's findings, and concludes that the need for and reasonableness of these definitions have been adequately demonstrated by the Statement.

U. Supplementary power.

The need for and reasonableness of this definition were discussed in the Statement; that discussion has been reproduced in this Order in the discussion of the "Backup power" definition.

The Examiner reported receiving no comments relative to this definition. He found that the need for and reasonableness of this definition had been adequately supported by the Statement.

The Commission adopts the Examiner's findings, and concludes that the need for and reasonableness of this definition have been adequately demonstrated by the Statement.

V. System emergency.

The Commission's Statement contained the following discussion of this definition:

> The proposed rules have specific provisions governing utility treatment of qualifying facilities during system emergencies, as called for in the FERC rules, so it is necessary to define system emergency. The definition used corresponds with the one used by the FERC in 18 CFR § 292.101 (b)(4), and is, therefore, reasonable for use in this application.

The Examiner noted that no comments were received relative to this definition. He found that the Statement adequately supported the need for and reasonableness of this definition.

The Commission adopts the Examiner's findings, and concludes that the need for and reasonableness of this definition have been adequately demonstrated by the Statement.

W. System incremental energy costs.

The Commission discussed this definition in the Statement as follows:

> This term needs definition because it lies at the heart of the calculation to determine a utility's avoidable energy costs. The proposed definition is reasonable in light of two considerations. First, the definition is consistent with the way the term is used in the electric utility industry, and will, therefore, be easily understood by utilities seeking to follow the procedures established by these rules. Second, the definition may be seen as summing the variable costs of generating an additional kilowatt-hour at any time. The system incremental energy costs thus represent costs which may be saved if the utility does not generate that additional kilowatt-hour. These costs are clearly avoidable costs, and are reasonably used in determinations of avoided costs of utilities.

The Examiner discussed the definition as follows:

> Section 3.0451 W. defines "System incremental energy costs" as amounts representing the hourly energy costs associated with the utility generating the next kilowatt-hour of load during each hour. A definition of the term is necessary because it is used in calculating a utility's avoidable energy costs. The Commission suggests that the definition is reasonable because it is consistent with industry usage of the term and adequately summarizes the variable costs of generating an additional kilowatt-hour at any particular time. (Statement of Need and Reasonableness, p. 7). The only public comment received on the proposed definition was that of NSP which suggested a different definition but only to comport with its specific proposal relative to § 3.0452 B. of the proposed rules. (See, Pub. Ex. 6, NSP. p. 4). Since the Hearing Examiner has not accepted the proposal of NSP relative to § 3.0452 B. of the proposed rules, the different definition suggested by the Company is not appropriate. The definition of System incremental energy costs proposed is both necessary and reasonable.

The Commission adopts the Examiner's findings, and concludes that the need for and reasonableness of this definition have been adequately demonstrated.

X. Utility.

The Commission initially proposed a definition of "utility" that included all public utilities engaged in the generation, transmission, or

distribution of electricity in Minnesota, including cooperative electric associations and municipal electric utilities. The Commission explained this choice in the Statement:

> These proposed rules place many demands on utilities, so it is necessary to define utility to know which entities are required to act. The definition includes only electric utilities, which is reasonable because qualifying facilities will not be interconnecting with any utilities other than electric utilities. The definition includes cooperative and municipal utilities which, in general, are not subject to rate regulation by the Commission. This inclusion is reasonable in that the Minnesota Legislature specifically determined in M.S. § 216B.164, subd. 2, that the Commission's rules on this matter were to apply to all Minnesota electric utilities, including cooperative electric associations and municipal electric utilities.

The Commission further stated its reasons for including cooperatives and municipals in the Comments:

> M.S. § 216B.164 expressly states that the cogeneration and small power production act and rules "shall apply to all Minnesota electric utilities, including cooperative electric associations and municipal electric utilities, that become interconnected with any qualifying facility as defined in 18 C.F.R. 292.101(b) (1)." The question has arisen whether under this section these proposed rules may be applied to all electric utilities or only to an electric utility that has already interconnected with at least one cogeneration or small power production facility. The sounder interpretation based upon the principles of statutory construction appears to support the broader reading that the act and these rules apply to all Minnesota electric utilities.
>
> The "Applicability" subdivision in M.S. § 216B.164 is necessary because Chapter 216B as a whole does not typically apply to cooperatives and municipal electric utilities. The subdivision expands the Commission's jurisdiction over utilities, when there is a possibility of interconnecting with alternative energy sources. Under the first rule of statutory construction, which is to ascertain the legislative intent within the language of the statute, this subdivision clearly expands the jurisdiction of the Commission to meet a specific problem, which is the relations between utilities and these other energy producers.
>
> The phrase "that become interconnected with any qualifying facility . . ." does not appear to be a limiting clause that reduces or renders variable the scope of the Commission's jurisdiction over Minnesota electric utilities for purposes of this section. The word "that" is a personal pronoun like "who" or "which." It typically precedes an explanatory phrase that is intended to make more clear the subject preceding it. The phrase should not be considered to limit the Commission's authority to regulate all electric utilities in the area of their relations with qualifying facilities.
>
> In this instance, this interpretation of the phrase is necessary to give effect to the statute as a whole. Otherwise, an electric utility not otherwise covered by Chapter 216B could avoid jurisdiction under section 164 merely by declining to interconnect with any qualifying facility. The Commission's jurisdiction to resolve disputes is no greater nor no lesser than its jurisdiction over rules. See, M.S. § 216B.164, subd. 5 and subd. 6. Both subdivisions are dependent upon the applicability of the section as a whole. A restrictive reading of subdivision 2 on applicability could deny the Commission jurisdiction to hear a dispute over interconnection in the first instance and effectively allow the electric utility, rather than the Legislature or the Commission, to determine whether the statute applies. When enacting a statute, the Legislature does not intend a result that is absurd or impossible to execute. See, M.S. § 645.17.
>
> Further, it is appropriate to construe the applicability of this section broadly in order to satisfy the legislative intent expressed and found in the statute. Subdivision 1 sets forth the scope and purpose of the act, which states:

This section shall at all times be construed 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.

M.S. § 216B.164, subd. 1 (1981 Suppl.) Consistency and certainty in the application of the statute can be achieved through the application of rules, even more than through the resolution of disputes, involving interconnection. Thus, rules governing the circumstances and conditions of interconnection should be found within the scope and applicability of this act in order to create an environment that encourages cogeneration and small power production and yet at the same time is in the ratepayers' and the public interest.

In order to carry out the words of the statute, according to their common and ordinary usage, as well as to execute the legislative intent clearly expressed in this section, the rulemaking authority of the Commission under this section must be applicable to all electric utilities, including cooperatives and municipal electric utilities. Rule sections such as the filing requirements (4 MCAR § 3.0452) and dispute resolutiuon (4 MCAR § 3.0460) are part of the affirmative environment that will encourage the introduction of qualifying facilities and are thus necessary to carry out the intent of the Legislature as found in the language of this section. The Examiner should find that the Commission has authority to promulgate these rules for all Minnesota electric utilities.

The Examiner found that a definition of the term "utility" is necessary due to the requirements in the proposed rules that a utility engage in specific activities. However, based upon his findings on the Commission's statutory authority to adopt these rules, he found that the proposed definition exceeded that authority and recommended revising the second sentence to clarify that cooperative electric associations and municipal electric utilities would not be included in the definition of "utility" until after an initial interconnection by that utility with a qualifying facility took place.

In his discussion of the Commission's ability to promulgate rules on cogeneration, the Examiner discussed several possible interpretations of the portion of the enabling legislation which authorizes the Commission to adopt rules, M.S. § 216B.164, subd. 6, and the portion of the legislation, M.S. § 216B.164, subd. 2, that limits the application of the cogeneration and small power production statute to "all Minnesota electric utilities, including cooperative electric associations and municipal electric utilities, that become interconnected with any qualifying facility as defined in 18 C.F.R. § 292.101 (B) (1)."

The Examiner noted three possible interpretations of the law:

that the law, and thus the rules, apply to all utilities regardless of the utility's form of ownership or interconnection status;

that the law, and thus the rules, only apply to utilities that have interconnected with a qualifying facility, regardless of the utility's form of ownership; or

that the law, and thus the rules, apply to all rate-regulated utilities, and to non-rate-regulated utilities only upon their interconnection with a qualifying facility.

He rejected the first, which was the Commission's, interpretation of the law, finding that this interpretation would render the language on interconnection in M.S. § 216B.164, subd. 2, mere surplussage, and would be contrary to recognized principles of statutory construction. He further found that the Commission did not have general rulemaking authority outside the cogeneration and small power production section of the law to adopt rules governing non-rate-regulated utilities, and thus could only draw its authority over those utilities from M.S. § 216B.164.

The Examiner also rejected the second possible interpretation of the statute, finding that a construction that prohibited the Commission from adopting rules regulating the relationship between any Minnesota utility and a qualifying facility until an interconnection had taken place would create a

conflict with § 210 of PURPA and the associated FERC rules. He noted that the Commission is mandated by the Federal law and rules to adopt rules governing the relationship between rate-regulated utilities and qualifying facilities, and reasoned that such a construction would impermissably limit the application of governing federal authority. He found that a statutory construction which avoids constitutional prohibitions is to be preferred if it can be reconciled with the statutory language.

The Examiner then found that the third possible interpretation of the law would give maximum effect to all the language of the subsection without impermissibly limiting the application of governing Federal authority. He noted that punctuation marks do not have the same controlling force of evidence of legislative intent as do words, and that the final comma in M.S. § 216B.164, subd. 2, could be read to apply the requirement of interconnection with a qualifying facility only to non-rate-regulated cooperatives and municipal electric utilities without accomplishing an unreasonable or absurd result.

The Examiner also rejected the Commission's concerns, stated in the Comments, that removing cooperatives and municipals from initial Commission jurisdiction could frustrate the intent of the law by allowing those utilities to avoid interconnection by refusing a first interconnection. He argued that PURPA, in § 202, and the FERC rules, in § 292.303(c), mandate initial interconnection regardless of whether the utility is rate-regulated or not. In his view, this would allow a rejected potential qualifying facility to seek relief from the FERC or through court action. He also noted that, under § 202 of PURPA, a state regulatory body can apply to the FERC for an order mandating interconnection.

The Commission adopts the Examiner's findings on the statutory interpretation of M.S. § 216B.164, subd. 2, and concludes that its jurisdiction, to be exercised through the proposed rules, extends to all rate-regulated utilities and to any non-rate-regulated utility that becomes interconnected with a qualifying facility.

The Commission's concerns that non-rate-regulated utilities might impede the development of qualifying facilities by simple refusal to interconnect have been reduced by several factors. As the Examiner noted, non-rate-regulated utilities are required by 16 USC § 824a-3(f)(2) to implement the FERC rules on interconnection and purchase. 292.CFR § 303(a) creates an obligation on the part of the utility to purchase from qualifying facilities. 16 USC § 824a-3(h)(2)(B) allows a qualifying facility to petition the FERC for enforcement of a non-rate-regulated utility's cogeneration rules. 16 USC § 824a-3(g)(2) allows a qualifying facility to bring a court action to enforce those rules. Most important, 16 USC § 824i(2) gives the Commission the right to apply to the FERC for an order requiring a non-rate-regulated utility to interconnect with a qualifying facility. While there may well be practical limitations on the ability of a small qualifying facility to seek administrative relief from the FERC in Washington, D.C., or to undertake a court suit to enforce its rights, the Commission will be able to alert the FERC of any actions contrary to Federal law or rules that are brought to the Commission's attention, and will be able to apply to the FERC for the appropriate relief.

The Examiner found that the Commission could remedy the defect in the definition of "utility" by revising the second sentence to more accurately reflect the Commission's jurisdictional limitations. He made no express finding on whether such a revision would constitute a substantial change within the meaning of M.S. § 14.15, subd. 3. The Commission finds that altering the definition of "utility" as it has done in response to the Examiner's findings is not a substantial change, since the rules as originally proposed gave adequate notice of the Commission's intent to assert jurisdiction over the broadest possible range of utilities, and did in fact prompt comments from those utilities seeking to avoid that jurisdiction. The change made to the rules as finally adopted is in response to those comments, and is limited to the jurisdictional restriction of the statute.

The Commission concludes that the definition in its final form is necessary and reasonable, and will order it adopted.

4 MCAR § 3.0452. Filing Requirements.

A. Filing dates.

B. Filing Option.

In the Statement, the Commission explained the importance of timely cost data and the reasonableness of the filing dates as follows:

> It is necessary that the covered utilities file timely cost information so that the cogeneration and small power production tariffs will reflect up-to-date avoided costs as required by M. S. § 216B.164, subd. 3. At the same time, the Commission wishes to minimize the administrative burden on the reporting utility. Accordingly, it is reasonable that the cogeneration and small power production tariff be filed every 12 months. The initial filing will be required within 60 days of the effective date of this rule to allow the covered utility adequate time to prepare the tariff filings.

The Commission made several language changes to the rules as initially proposed. The rules as finally proposed reduced the administrative burden and cost of compliance with the rules. In the Comments, the changes were discussed as follows:

> The first change puts the second filing date at January 1, 1984, one year later than in the proposed rule. This change is necessary to accommodate the delay already experienced in promulgating final rules.
>
> The second change provides an option for small generating utilities to eliminate the greatest portion of administrative burden and expense: the calculation of their avoided costs on Schedules A and B. Utilities pursuing this option would simply file their retail rate schedules instead of Schedules A and B. No calculation would be required, and the annual filing would be simply a process of gathering the necessary documents. This option would apply to generating utilities with annual sales of less than 500 million kilowatt-hours. The FERC rules use this cut-off point to identify utilities which do and do not have to file avoided cost data as specified in 18 CFR § 292.302. It is reasonable to use the same size criterion to reduce complexity. It is also reasonable to keep this whole procedure optional: nothing should act to prevent the utility from calculating its avoided costs and filing them, if it wishes.
>
> The third change is necessary to clarify the rule and reduce the administrative burden and expense on non-generating utilities. During the hearings, a concern was expressed that non-generating utilities might be unable to comply with the rules in the event that their wholesale suppliers refused to supply them the data necessary for Schedules A and B. The proposed change addresses this concern, clarifying that Schedules A and B need only be filed at the option of non-generating utilities. If the non-generating utility is unable to or does not wish to calculate the Schedule A and Schedule B avoided costs, the option is open to simply file Schedule G. Again, the rule does not prevent any utility from filing and using its actual Schedule A and B avoided costs. The data from the wholesale supplier is appropriate because it is costs of generation - which are incurred by the supplier - which may be avoided because the qualifying facility is providing electricity.

The Hearing Examiner found the rule as finally proposed both necessary and reasonable except to the extent that it would require the refiling of the tariff every 12 months whether or not there was a change to the tariff. He found that the Commission should amend the rules to allow a utility to formally advise the Commission in writing that there has been no change in its cogeneration and small power production tariff currently on file as a substitute for a physical annual tariff refiling.

The Commission agrees with the Examiner that a needless expense would arise without any attendant benefits if a utility were required to refile unchanged tariffs annually and adopts the Examiner's findings. 4MCAR § 3.0452 A remains essentially unchanged, reflecting only one technical change to recognize the deletion of 4 MCAR § 3.0463. However, 4 MCAR § 3.0452 B is a new section which is directly responsive to the recommendations of the Examiner. It provides that the annual tariff refiling is necessary only if there has been a change to the tariff. Of course, all covered utilities would still be required to make the initial filing.

The Commission adopts the Examiner's findings, and concludes that the need for and reasonableness of this definition has been adequately demonstrated.

C. Schedule A.

The need for and reasonableness of the information required by Schedule A was explained in the Statement as follows:

> The hourly incremental energy costs are the direct fuel and variable operation and maintenance costs incurred by a utility when an additional kilowatt-hour is produced. As such, the incremental energy cost is the direct cost that will be avoided by the utility if a qualifying facility generates that kilowatt-hour instead of the utility. It has been the Commission's experience that incremental energy costs exhibit significant diurnal and seasonal variation. Each utility will have a unique set of hourly incremental energy costs due to such things as its generation mix and its load pattern. Consequently, this information is necessary for the computation of the utilities' avoided costs and it is reasonable to expect these costs to be peculiar to each utility. It is necessary for these incremental energy costs to be projected and reported for the next five years to enable potential qualifying facilities to evaluate the probable benefits of installing electric generation equipment. If the projection were made only for the coming year, there would be insufficient information for the qualifying facility to determine likely energy payments, because there could be no trends established. On the other hand, projection of these costs over a period of, for example, 10 years, would undoubtedly be costly, and the results of projections that far in the future could hardly be relied on. The choice of a 5 year projection is thus a reasonable compromise which yields useful results without extraordinary costs.
>
> The utilities are required to file their method of determining daily peak and off-peak and seasonal hours in order to provide interested parties an opportunity to review the methods and make judgements as to their reasonableness. This is necessary to insure that appropriate avoided cost rates are computed and to insure that the time periods selected are reasonable..

Evidence presented at the public hearings by the Minnesota Rural Electric Association (MREA) indicated that Schedule A failed to take line losses into account. The Commission agreed and revised the proposed rule to require the adjustment of energy costs for line losses. In the Comments, the Commission discussed the two changes incorporated into the rules as finally proposed as follows:

> First, an adjustment for line losses would apply to the energy component of costs. It was due to a simple oversight that the line loss calculation was not applied to Schedule A data in the proposed rule. This oversight was brought to the Commission's attention through the comments of the Minnesota Rural Electric Association (MREA). Capacity amounts are adjusted for line losses, so to be consistent, energy amounts must also be adjusted for line loses. Both factors are affected in precisely the same way by this phenomenon.
>
> The second change regarding line losses specifies that the percentage amount of the adjustment for line losses will be limited to one half of the utility's reported line losses. At least two parties testified that transformer core losses would be associated with the generation of power produced by qualifying facilities. It was also stated in testimony that approximately 50 percent of a distribution system's losses are due to energizing the transformer core. Because this is a cost which, in all likelihood, will not be reduced due to the provision of power by qualifying facilities, the Commission recommends that avoided costs be calculated using 50 percent of the reported line losses rather than 100 percent of reported line losses.
>
> It should be noted that the MREA commented that other losses, in addition to transformer core losses, would not be avoided due to the provision of power by qualifying facilities. The Commission observes that Mr. Eicher, commenting for the MREA, excluded transmission

losses in his analysis. To this extent, his estimate that only 30 percent of the losses would be associated with qualifying facility supplied power is too low. Consequently, the Commission believes that the 50 percent figure used is a reasonable approximation of the line losses which a qualifying facility may cause the utility to avoid.

The Examiner agreed with the Commission on this section of the proposed rule. He found that M. S. § 216B.164 requires a utility to reimburse fully a qualifying facility for both the utility's avoided energy and capacity costs. Further, he stated that the availability of the information will allow the Commission to administer the filed rates and provide a potential qualifying facility with the information necessary for it to determine the cost effectiveness of commencing operations in a particular location. Accordingly, he concluded that this section of the rule as finally proposed was both necessary and reasonable.

The Commission finds that the need for and reasonableness of the rule as finally proposed has been amply demonstrated and consequently adopts it as finally proposed.

D. Schedule B.

D. 1.

This subsection requires that Schedule B contain specific information relative to all planned utility generating facility additions anticipated during the next ten years. In the Statement the Commission explained the necessity and reasonableness of the required information as follows:

> Information regarding the operational characteristics of all planned utility generating facilities is necessary so that the Commission and any interested party can effectively make comparisons of utilities' generation plans and make judgments concerning the reasonableness of these plans. The costs associated with the planned generation facility are estimated future costs. As such, it is reasonable that the Commission be provided with at least a minimal description of the facility to be constructed. A disclosure of the name of the unit, its nameplate rating, the fuel type, energy costs and projected number of kilowatt-hours to be produced by the plant will provide a barebones sketch of the most important operating characteristics of the unit. It is reasonable to expect that any utility planning a major expenditure of this nature would have this basic information readily available. The in-service date, the completed cost per kilowatt, anticipated average annual fixed operation and maintenance cost in dollars per kilowatt, and the annual fuel savings are all required in order for the avoided capacity related generation costs to be calculated in 4 MCAR § 3.0452 (B) (4).

The Examiner concurred that the required information was both necessary and reasonable. The Commission finds that this subsection is necessary and reasonable, based upon the Statement, and adopts it as initially proposed.

D.2.

This subsection requires that Schedule B contain specified information relative to all planned firm capacity purchases other than from qualifying facilities during the next ten years. The Commission explained the reasonableness and necessity of this information in the Statement as follows:

> Planned firm capacity purchases are capacity purchases the utility intends to make to supplement its own generation or its present purchases, either indefinitely, or until it can bring its own new generation facilities on line. These purchases may be distinguished from capacity purchases to replace generation facilities during maintenance, and from unplanned purchases executed to take advantatge of transitory economies. Planned firm capacity purchases would appear in generation capacity expansion plans, and would be marked by identification of a specific kilowatt or megawatt purchase size.
>
> In the event that a utility does not have any generation facilities planned for construction in the next 10 years, the computation of tne utility's avoided capacity costs will be based on its planned firm

capacity purchases, excluding any purchases from qualifying facilities, during the next 10 years. The capacity cost and energy cost components of the rates paid by the utilities for such purchases are an integral part of the calculation of the avoided cost rates for sales by qualifying facilities. Consequently, the reporting of these figures is necessary in order for these calculations to be made. A utility exercising sound judgment would be likely to have this information readily available since it would be an important factor in its decision to purchase power rather than build an additional power plant. Hence, this reporting requirement is reasonable. In addition, the characteristics of the proposed purchases, the year of the purchase, the name of the seller and the number of kilowatt-hours purchased is information that would be readily available to the utility and is needed to evaluate the nature of the avoidable costs.

The Commission made no changes to the rule as initially proposed.

The Examiner found this section of the rule necessary and reasonable, as does the Commission, based upon the Statement.

The Commission adopts this section of the rule as initially proposed.

D.3.

This subsection requires that Schedule B contain the utility's reported overall average percentage of line losses due to the distribution, transmission and transformation of electric energy. It is necessary to require the reporting of the overall average percent of line losses because that figure is used in the calculation of the utility's avoided capacity costs required by 4 MCAR § 3.0452 D.4.g. Because an appropriate calculation of line losses is an integral part of the calculation of avoided capacity cost, reporting line losses is both necessary and reasonable. The Examiner concured that this section was necessary and reasonable. The Commission notes that no objections were made to the reporting of line losses and adopts this section as initially proposed.

D.4.

This subsection requires the calculation and reporting of the utility's net annual avoided capacity costs stated in dollars per kilowatt-hour averaged over both the on-peak hours and the overall hours. The purpose of this subsection was described in the Statement as follows:

> The rates paid to qualifying facilities will be determined, in part, by the capacity cost that the utility will avoid due to the electric energy deliveries from qualifying facilities, so the avoided capacity cost must be measured. Once it is measured it will be expressed in two ways: cost per on-peak kilowatt-hour and cost per kilowatt-hour averaged over all hours. Qualifying facilities choosing to sell power based upon time of delivery would be compensated for the utilities' avoided capacity cost based upon the qualifying facility's on-peak deliveries. The qualifying facility would only receive compensation for deliveries of energy during off-peak hours. Qualifying facilities not choosing the time-of-day option would receive compensation for avoided capacity costs based upon total kilowatt-hour deliveries. It is shown below that such a division between on-peak capacity rates and all-hours capacity rates is necessary to appropriately compensate qualifying facilities and at the same time it is reasonable because it facilitates a system that minimized administrative costs.

The Examiner found this section necessary and reasonable.

The Commission finds that the necessity and reasonableness of this section has been adequately shown by the Statement, and adopts it as initially proposed.

D.4.a.

This subsection is the initial step in the calculation of the net annual avoided capacity cost. It requires the utility to multiply the completed cost per kilowatt of a utility's next major generating facility addition by a carrying charge rate. The justification for this calculation was explained in the Statement as follows:

Since a utility's electric generating plant will [illegible] service for longer than a one year period, its costs must be spread out over a period of time representative of its expected useful life. This is accomplished by determining an appropriate marginal capital carrying charge rate, as discussed in the definition section earlier, and applying it to the investment cost of the new generation facility. The Commission is aware that some utilities may have difficulty determining the marginal capital carrying charge rate, which requires a complex calculation, so a default value of 15 percent has been established. This rate is reasonably close to comparable figures presented in recent electric utility rate case proceedings before this Commission. Such cases include Minnesota Power and Light, Docket No. E-015/GR-80-76 and Interstate Power Company, Docket No. E-001/GR-78-1065. Consequently, this figure may be used as a practical alternative for a utility that is unable to determine such a rate. This section of the proposed rule is necessary and reasonable because it provides for a reasonable estimate of the utility's avoided cost.

In the rules as finally proposed, the term marginal capital carrying charge rate was replaced by the term marginal capital carrying charge rate in the first year of investment. This change was necessary in this section because the identical change was made in the definitions section.

The Examiner found that record testimony supported a limitation of the marginal capital carrying charge rate to that experienced in the first year of investment. He concluded that this section is necessary and reasonable.

The Commission adopts the Examiner's findings and concludes that the necessity and reasonableness of this section has been amply shown and adopts it as finally proposed.

D.4.b.

This subsection requires that the calculation set forth in 4 MCAR § 3.0452 D.4.a. be discounted to present value. The justification for this adjustment was explained in the Statement as follows:

> It is important that the dollar amounts used in calculating the avoided cost based rates are stated in dollars of the year in which the rates are applicable. Due to inflation and the time preference for money, a dollar spent a few years from today is not as valuable as a dollar spent today. In order to compare dollars to be spent in the future with dollars spent today, future dollars must be discounted. An appropriate discount factor is the overall rate of return authorized by the Commission for each utility. This figure, which is a reasonable approximation of the cost of capital to the individual utility, captures the effects of inflation and investors' time preference for money. Obviously, if the utility is not rate regulated by the Commission, an overall rate of return will not be established by the Commission. In such a case, the overall rate of return most recently authorized by the Commission for the largest electric utility in the Commission's jurisdiction is a reasonable approximation of the appropriate discount rate. Also, such a figure is readily available. This entire section of the proposed rule is a necessary and reasonable step in the computation of the utilities' avoided costs.

Subsequently, in response to record testimony, the Commission changed the discount rate for present value calculations from the most recently authorized overall rate of return to the incremental cost of capital. In the Comments the Commission explained the need for this change as follows:

> This change is responsive to comments that the overall rate of return is inappropriate because it is based on historical capital costs, and will overstate avoided capacity costs during times of inflation, and understate them during times of deflation. It is reasonable to use the incremental cost of capital because the incremental cost reflects current capital costs, which are themselves the market estimate of future costs.

The Examiner found no testimony in the record opposing the recognition of a reserve margin in the calculation of avoided capacity costs when a qualifying facility provides firm power. He found that since a qualifying facility may provide firm power, it is reasonable to include the recognition of an appropriate reserve margin.

The Commission adopts the Examiner's findings, concludes that this section necessary and reasonable, and adopts it as initially proposed.

D.4.f.

This section takes the average annual fixed operating and maintenance costs into account. The purpose of this section was explained in the Statement as follows:

> When an electric utility installs a new generation plant it will incur fixed operation and maintenance costs, on an annual basis, which results from the installation of this plant. If this generation plant is not installed those costs will be avoided. Clearly, it is necessary and reasonable that those costs be included in the amount representing avoided capacity costs.

The Commission made a slight change to the rule as initially proposed as described in the Comments:

> In this portion of the proposed rule, avoided capacity costs are increased by an amount equal to the annual fixed operation and maintenance cost of the next anticipated generation plant. At least one party commented that those costs were not discounted to present value. It was due to an oversight that these costs were not discounted to present value in the proposed rule. It is necessary that these costs be discounted to present value in order to correctly reflect the time value of money and to put all calculations on a consistent basis.

The Examiner found this section as finally proposed both necessary and reasonable.

The Commission adopts the findings of the Examiner, and concludes that the need for and reasonableness of this section has been adequately demonstrated by the Statement and Comments.

D.4.g.

This section adjusts the avoided capacity costs for line losses. The purpose of this section was described in the Statement as follows:

> Utilities typically generate electricity at centralized generation stations, step up power to transmission level voltage, transport it via transmission and subtransmission facilities to load centers, step down the power to distribution level and deliver it, via distribution facilities, to customers' locations. In the process of transforming and delivering power to load centers and to individual locations, significant amounts of electric power are lost. Since the output from qualifying facilities will typically be located near load centers, the amount of line losses from qualifying facility located near load centers, the amount of line losses from qualifying facility delivered power may be negligible. Consequently, for each kilowatt-hour produced by qualifying facilities, the utility will be able to avoid more than 1 kilowatt-hour of electric generation. For example, if the utility's reported average system line losses are 10%, the utility would avoid the production of 1.1 kilowatt-hours for each kilowatt-hour delivered by a qualifying facility. In order for the qualifying facility to be appropriately compensated for the avoided cost of the utility, consideration of the line loss is necessary and reasonable.

Upon consideration of record testimony, in the section as finally proposed the line losses adjustment was restricted to a percentage amount equal to one-half of the utility's average system line losses.

The Examiner found this section, as finally proposed, both necessary and reasonable.

The Commission adopts the findings of the Examiner, and concludes that the need for and reasonableness of this section has been adequately demonstrated.

D.4.h.
D.4.i.

The purpose of these sections was described, in part, in the Statement as follows:

> Up to this point in the calculation of the capacity related avoided generation costs, all costs have been expressed in terms of dollars per kilowatt. However, rates paid to qualifying facilities will be based upon kilowatt-hour deliveries, not kilowatt deliveries. Therefore, the cost per kilowatt must be converted to cost per kilowatt-hour. In fact, there must be two separate conversions. In this section of the proposed rule, the cost per kilowatt is converted to cost per on-peak kilowatt-hour. In this way customers providing on-peak power will be compensated for their proportionate share of the generation costs which are avoided.
>
> For qualifying facilities not choosing to sell power on a time-of-day basis, the capacity costs must be averaged over all hours instead of just on-peak hours.
>
> The Examiner found that these sections:
>
> complete the calculation in converting the avoided capacity costs to the utility's net annual on-peak avoided capacity costs stated in dollars per kilowatt-hour averaged over all hours. The provisions are reasonable since they require utilities to compensate qualifying facilities for delivered capacity on a basis appropriate to the delivery of energy with respect to the system peak period.

The Commission adopts the findings of the Examiner, and concludes that the need for and reasonableness of these sections has been adequately demonstrated.

D.5.

This section specifies the calculation of avoided capacity costs to be reported in Schedule B in the event that the utility has no generating facility additions for the ensuing 10 years. This section was explained in the Statement as follows:

> If the utility has no planned generation facility additions for the ensuing 10 years, generation of electric energy by qualifying facilities will not help the utility avoid any generation capacity costs. Hence, under this condition, it would not be reasonable for the purchase rates to be based on avoided generation capacity costs.
>
> Even if the utility has no planned generation facilities, it may have planned capacity purchases. It is reasonable to assume that the utility can decrease these planned purchases if qualifying facilities deliver energy and capacity to the utility. The avoided cost to the utility would be the cost of the planned capacity purchase which would not have to be made. The cost of the planned purchase shall be expressed in current year dollars by applying an appropriate discount rate. In this way, qualifying facilities will be compensated on the basis of current year dollars. It is necessary and reasonable that rates accurately reflect the time period of expenditure because the value of the dollar changes over time.
>
> Since this section of the rule is applicable only to utilities with no planned generating facilities it is not appropriate to take into account the annual fixed operation and maintenance expenses associated with a new generating facility.
>
> Adjustments for a reserve margin and line losses are required in the same manner as in the previous section. In addition, the avoided costs are expressed on a kilowatt-hour basis in the same manner as in the previous sections. As previously discussed, those calculations are both necessary and reasonable.

In the Comments, the Commission discussed two changes to this section:

> This recommended addition to the proposed rules clarifies that this section applies only to utilities that have planned additional capacity purchases, other than from qualifying facilities, during the ensuing ten years.
>
> The Commission recommends a change in this paragraph to make the discount rate used for the present value calculation be the incremental cost of capital. This change simply parallels the change recommended in the computation of avoided capacity costs from additions of generating facilities.

The Examiner found this section, as finally proposed, both necessary and reasonable.

The Commission adopts the findings of the Examiner, and concludes that the need for and reasonableness of this section has been adequately demonstrated by the Statement and Comments.

D.6.

The Examiner made the following findings on this subsection:

> Section 3.0452 C.6., an entirely new provision in the rules as finally proposed, states that if a utility has neither planned generating facility additions nor planned additional capacity purchases during the next ten years, it has no avoided capacity costs. This provision makes explicit what was entirely explicit in the rules as initially drafted.
>
> A number of public witnesses indicated a need, to avoid any misunderstanding, for a specific provision relative to the absence of avoided capacity costs under the circumstances described. (See, Pub. Ex. 57, MinnKota Power Coop., Inc., p. 6; Pub. Ex. 93, Red Lake Co-op, Inc.; and Pub. Ex. 112, PKM Electric Co-op.).
>
> Subsection 6 of subpart C. is a reasonable clarification to make explicit what was otherwise implicit in the rule as initially drafted and avoids any possibility of confusion or misapplication of avoided capacity costs in rate calculation.
>
> Since the contents of this provision of the rule as finally proposed was completely implicit in the rule as initially drafted, the amendment does not result in a substantial change within the meaning of 9 MCAR § 2.111. (See, Pub. Ex. 93, Red Lake Co-op., Inc.).

The Commission adopts the findings of the Examiner, and concludes that the need for and reasonableness of this section has been adequately demonstrated and that the subsection does not result in a substantial change.

E. Schedule C.

This section requires each utility to file all standard contracts to be used with qualifying facilities. Its purpose was described in the Statement as follows:

> It is necessary and reasonable that all interested parties have available to them the standard contracts which a utility will use with qualifying facilities. This will allow qualifying facilities the opportunity to analyze the contracts and will give them an opportunity to either accept the contract or pursue a course of action whereby changes could be made in the contract. In addition, the requirement that all standard contracts be filed will help insure that all qualifying facilities are treated equally and fairly by the utility. Thus, this is a necessary provision since the Commission must implement fair and reasonable rates. It is reasonable because the utilities will have these documents readily available.

The Examiner found this section both necessary and reasonable.

The Commission adopts the findings of the Examiner, and concludes that the need for and reasonableness of this section has been adequately demonstrated by the Statement.

F. Schedule D.

This section requires each utility to file its safety standards, required operating procedures for interconnection operations, and the functions to be performed by any control and protective apparatus. The purpose of this section was described in the Statement as follows:

> It is necessary that the utility file its safety standards, required operating procedures for interconnection operations and the functions to be performed by any control and protective apparatus in order to facilitate communication between the utility and the qualifying facility. A clear understanding of the technical requirements will help the qualifying facilities minimize their cost of interconnection equipment and will minimize safety related problems. An explicit publicized statement of the activity's operating procedures will help the parties coordinate their activities. The rule provides that the utility may not make requirements of a qualifying facility that are overly restrictive or that are established to discourage cogeneration and small power production. This is both necessary and reasonable since it is consistent with the intent of M.S. § 216B.164, to give the maximum possible encouragement to cogeneration and small power production. Anything more restrictive would not be consistent with the intent of the state law. On the other hand, each utility is allowed to require the qualifying facility to install all necessary control and protective apparatus as specified in 4 MCAR § 3.0462. Consequently, the proposed rule is consistent with the protection of the ratepayer and the public, as required by M.S. § 216B.164, subd. 1, and is necessary and reasonable.

The Examiner found that this section both necessary and reasonable.

The Commission adopts the findings of the Examiner, and concludes that the need for and reasonableness of this section has been adequately demonstrated by the Statement.

G. Schedule E.

The Examiner stated that this section:

> . . .requires that the utility file with the Commission a statement of its procedures for notifying affected qualifying facilities of those periods of time when the utility will not purchase energy or capacity from a qualifying facilities "because of extraordinary operational circumstances which would make the costs of purchases during those periods greater than the cost of internal generation."
>
> The FERC Rules require a state commission to adopt rules specifying a procedure for notifying affected qualifying facilities of periods during which the utility will not purchase energy or capacity because of "extraordinary operational circumstances."

The Examiner also noted that a number of public witnesses commented that the phrase "extraordinary operational circumstances" is unduly vague. On this matter, he concluded that

> It is clear that, to qualify as an extraordinary operational circumstance, the condition must be one internal to the utility such as a light load factor which has the effect of rendering internal operation of its plant cheaper than the purchase of energy from a qualifying facility during a specified period. (Statement of Need and Reasonableness, p. 14). The Hearing Examiner finds that the phrase is adequately described in the proposed rule and is not subject to more precise definition. Moreover, any attempt by the utility to use the ability to suspend purchase of energy from a qualifying facility during an extraordinary operational circumstance is subject to review by the Commission as a consequence of § 3.0460.
>
> He concluded that this section is necessary and reasonable.

The Commission adopts the Examiner's findings, and concludes that the need for and reasonableness of this definition has been adequately demonstrated.

H. Schedule F.

This section requires the filing of all of the computations made by the utility in determining Schedules A and B. This section was explained in the Statement as follows:

> This filing requirement is necessary in order for the Commission and all interested parties to review the reasonableness of the utilities' computational methods. Such a review may be necessary to determine whether or not the utilities' filings conform with the requirements of the rule. This requirement is reasonable since the Commission is responsible for the enforcement of the rule.

The Examiner found this section both necessary and reasonable.

The Commission adopts the findings of the Examiner, and concludes that the need for and reasonableness of this section has been adequately demonstrated by the Statement.

I. Schedule G; special rule for non-generating utilities.

The Statement explained the purpose of this section of the rules as initially proposed as follows:

> Schedule G applies to utilities that purchase all of their power for resale. Such a nongenerating utility is required to file Schedules A-G excluding E. The information for Schedules A and B are to be determined from cost information provided by the utility's suppliers since the nongenerating utility would have no such information pertaining to its own system. This information will be necessary for the Commission and other interested parties to compare the generation costs of all utilities and this will provide potential qualifying facilities with information that will help them estimate the likely future avoided cost payments from the utility. Schedules C, D and F are necessary and reasonable for the reasons stated above. Schedule E is not needed because the conditions assumed thereunder do not apply to nongenerating utilities. Schedule G is necessary because the rates for purchase of power delivered by qualifying facilities will be based on the rates paid by the utility for power from its normal supplier. The reasonableness of this basis for the avoided cost computation will be discussed in this statement under the explanation of 4 MCAR § 3.0455.

Several changes to the rules as initially proposed were discussed in the Comments:

> The Commission recommends changes in this paragraph which clarify the rule, reduce the administrative burden and expense on utilities, and, in conjunction with other recommended changes, permit utilities to choose between paying rates based on avoided costs or paying higher rates without expending the time and money to determine their avoided costs. The recommenced changes are responsive to comments received from both municipal utilites and cooperative utilities.
>
> With the recommended changes, each non-generating utility files its wholesale purchase rates as Schedule G. Testimony received at the hearings indicated that several non-generating utilities purchase power from more than one supplier. The rule as recommended reasonably requires that Schedule G be based on the supplier from which purchasess may first be avoided. For example, if a non-generating utility purchases most of its requirements from supplier A, and supplements them with purchases from supplier B, purchases from supplier B would be avoided first. The utility would file as Schedule G the wholesale rate of supplier B.
>
> Municipal utilities were concerned that their suppliers would not provide them data for Schedules A and B. The recommended change clarifies the proposed rule to explicitly state that Schedules A and B are optional for non-generating utilities. This change is in line with the interpretation presented by Commission staff during the hearings.

The recomended change continues to permit non-generating utilities to file Schedules A and B. This is reasonable because the avoided generation costs calculated on Schedules A and B are the real costs which may be avoided due to electric generation by qualifying facilities. It is reasonable to assume that Schedule G rates will in most cases exceed Schedule A and Schedule B avoided costs. Therefore, utilities which avail themselves of the option with the lesser administrative burden, filing Schedule G, will not thereby subject qualifying facilities to lower rates. At the same time, utilities which choose to file actual costs which may be avoided, in the form of Schedules A and B, will pay the statutory requirement of full avoided costs.

As with Schedule G itself, if the nongenerating utility with more than one supplier chooses to also file Schedules A and B, the recommended change insures that Schedules A and B contain data from the supplier from which purchases would first be reduced or avoided.

The Examiner found this section, as finally proposed, necessary and reasonable. He also found that the changes did not result in a substantial change within the meaning of 9 MCAR § 2.111.

The Commission adopts the findings of the Examiner, and concludes that the need for and reasonableness of this section has been adequately demonstrated by the Statement and Comments.

J. Availability of filings.

This section specifies that all filings required by 4 MCAR § 3.0452 A-I shall be made with the Commission and shall be maintained at the utility's offices. The purpose of this section was explained in the Statement as follows:

It is necessary that all tariff filings concerning purchase rates be made readily available so that the Commission, all qualifying facilities, and any potential qualifying facility can estimate present and future avoided cost based purchase rates. Access to filings will allow interested parties an opportunity to make a judgment as to the reasonableness of all computations and an opportunity to understand their responsibilities as sellers of energy to a utility. Restricting access to the filed information would serve to frustrate the purpose of M.S. § 216B.164 by discouraging cogeneration and small power production and would be unreasonable.

The Examiner found this section both necessary and reasonable.

The Commission adopts the findings of the Examiner, and concludes that the need for and reasonableness of this section has been adequately demonstrated by the Statement.

4 MCAR § 3.0453. Reporting Requirements.

A. General Requirements.

4 MCAR § 3.0453 A requires each utility which is interconnected with a qualifying facility to provide the information specified in subsections B through D of the section and allows the filing of certain information specified in subsections E and F.

The Commission discussed this portion of the rules in the Statement in the following manner:

Pursuant to M.S. § 216B.164, subd. 7, the Commission is required to submit a report to the Legislature on Jan. 1, 1983.

Such a report must address at a minimum, the following issues:

1) The location, type, and output of cogenerators and small power producers in the state;

2) Whether cogeneration and small power production has resulted in any major impacts on the utility system; and

3) The effectiveness of the provisions of the state law and the Commission's rules in encouraging cogeneration and small power production.

Because of this statutory requirement, the Commission must obtain reliable and accurate information from which a report may be compiled.

The Commission believes that such a reporting requirement is necessary and reasonable, because in most cases only the utility will have possession of the needed data or access thereto. In addition, the Commission does not possess the resources necessary to adequately collect and assemble the essential information.

One of the basic premises underlying the cogeneration and small power producton portions of PURPA was to alleviate as many burdens on the qualifying facility as possible and to provide it with a favorable climate in which to operate. To impose the reporting requirements on the individual qualifying facility, over which the Commission does not have general regulatory jurisdiction, would place a burden on the qualifying facility which would be contrary to the intent of the FERC rules as well as pertinent portions of PURPA. Such a reporting requirement may be more appropriately placed on the utilities which are within the scope of traditional regulatory jurisdiction.

The Commission amended the rules as initially proposed to limit the application of the subsection to those utilities which have actually interconnected with a qualifying facility. The provision was also amended to require filing on or before November 1, 19832, on January 1, 1986 and every two years thereafter, rather than at any time the Commission may require such filings in the future.

These amendments were discussed by the Commission in the Comments in the following manner:

The Commission is recommending two changes in this section of the rule. The first change restricts the reporting requirements to utilities which are interconnected with qualifying facilities. This is reasonable because the reports are needed to gather information about interconnected operations, and no information is needed from utilities which are not interconnected with qualifying facilities. The result of this change would be a reduction in the time, effort, and expense of compliance with these rules for utilities which are not interconnected.

The second recommended change affects the timing of the reports. The initial report due date is extended one year, to November 1, 1983 as a practical matter. Although the Commission must report to the Legislature on January 1, 1983, it is impossible to have rules in place to require reports by November 1, 1983. It is reasonable to assume the Legislature would be interested in the information when it does become available. The recommended change would also require new reports every two years, to be filed concurrently with the annual filing requirements on January 1. The Commission believes that the information required in 4 MCAR § 3.0453 is very important, particularly since experience with interconnected operations is now so limited. The Commission is, therefore, recommending a continuing reporting requirement which will develop information not available elsewhere of the effects on utility systems of interconnected operations with qualifying facilities over time. By requiring the reports regularly at two-year intervals, the recommended change reduces the regulatory burden as much as possible, and removes what some have perceived as too much agency discretion.

The Hearing Examiner discussed 4 MCAR § 3.0453 A, as finally proposed, in the following manner:

The need for interconnected utilities to file such information is twofold. Initially, the Commission is required by Minn Stat. § 216B.164, subd. 7 (1981 Supp.), to report to the Legislature concerning the status of cogeneration and small power production activities within the State of Minnesota and its attendant impact on the utilities. Finally, since information regarding the status and impact of qualifying facilitiess is virtually non-existent in Minnesota and the Commission, to oversee the implementation of its rules, must have continuing knowledge of the development of cogeneration and small power production in the state of Minnesota, it

is necessary that relevant information is available to the Commission both initially and on a reasonably on-going basis. Since it is necessary that the Commission be apprised or relevant information concerning the status of cogeneration and small power production facilities in the state of Minnesota, it is reasonable that such information be filed with the Commission. The two-year period selected gives certitude to the scope of the demands to be made on utilities and reduces the attendant regulatory burden to the greatest extent consistent with the availability of accurate information.

The comment by the MMUA that there is no evidence in the record regarding the need for continued filings of such information (Pub. Ex. 117, MMUA Reply Comments, p. 9), overlooks the Commission's rationale for regular filings. (See, Agency Ex. J. p. 9).

Section 3.0453 of the proposed rules is both necessary and reasonable.

The Hearing Examiner also concluded that the amendments to 4 MCAR § 3.0453 A do not constitute a substantial change within the meaning of 9 MCAR § 2111. In reaching this conclusion, the Hearing Examiner reasoned the following:

> The amendments to § 3.0453 A. which limit its application to utilities that have actually interconnected with a qualifying facility and specify the time interval for subsequent filings of the requested information do not constitute a substantial change within the meaning of 9 MCAR § 2111. The amendments introduced were solely for the purpose of responding to adverse comments made by public witnesses at the hearings. As such, they are clearly a logical outgrowth of the hearings which have the effect only of reducing the regulatory burden on affected utilities without compromising the integrity of the information sought.
>
> Since the only affected party is benefited by the change without adverse impact on any other potential interested person, the change results in no prejudice. A change benefitting all potentially interested persons adopted as a result of testimony received at the public hearings and adequately supported by the existing record is not a substantial change within the meaning of 9 MCAR § 2111.

The Commission adopts the findings and conclusions of the Hearing Examiner and concludes that the need for and reasonableness of 4 MCAR § 3.0453 A has been adequately demonstrated. The Commission further concludes that the amendments to this section do not constitute a substantial change within the meaning of 9 MCAR § 2.111.

B. Net energy billed qualifying facilities.

C. Other qualifying facilities.

4 MCAR § 3.0453 B requires an interconnected utility to provide specified information relative to interconnected qualifying facilities operating under net energy billing. The information to be filed details the operation and effect of qualifying facilities using net energy billing.

4 MCAR § 3.0453 C requires that certain specified information be filed by a utility with respect to its interconnected activities with qualifying facilities under rates other than net energy billing.

The Commission generally discussed the reporting requirements in the Statement as follows:

> In order for the Commission to accurately assess and report on the output of interconnected qualifying facilities as required by M.S. § 216B.164, it is necessary for the Commission to require the utilities to submit a summary of the following where applicable:
>
> 1. Total number of interconnected qualifying facilities.
>
> Such information is needed for the Commission to determine the extent of interconnected qualifying facilities as well as to evaluate the distribution of qualifying facilities within the respective service areas throughout the state.

2. Nameplate ratings.

The nameplate ratings are necessary to appraise the apparent addition of capacity through the interconnection of qualifying facilities.

3. Type of interconnected qualifying facilities.

By distinguishing qualifying facilities by type (e.g., wind, photovoltaic, hydro, etc.), the Commission will be able to determine what technologies are in fact being utilized as well as providing public information with respect to the use and contribution of various technologies.

4. For each qualifying facility type, the total Kwh deliverd per month to the utility.

This information is needed to effectively evaluate the amount of energy generated by small power production and cogeneration units in Minnesota. Such information is of great public importance also, as it may indicate the viability of alternative means of energy generation in the future. By segregating the information into unit types, the Commission will be able to appraise the relative effectiveness and contribution of energy to the system by different types of qualifying facilities, as well as to determine which technologies are capable of significant current contributions to the utility's system.

5. For each qualifying facility type, the total Kwh delivered per month by the utility.

This information is needed to evaluate the total impact of qualifying facilities on the utility system. Such information will allow the Commission to determine what effect, if any, interconnection of qualifying facilities will have on the system load.

6. For each qualifying facility type, the net energy delivered per month to the utility.

This data is needed to analyze the net impact of cogeneration and small power production units on the system as well as to assess the potential benefit to be gained from alternative means of energy production.

7. For each qualifying facility type, the total Kwh delivered per month to the utility, reported by on-peak and off-peak periods.

This information will allow the Commission to review the total amount of energy generated by those qualifying facilities not under the net billing option. By distinguishing between on-peak and off-peak deliveries, it will be possible to determine whether or not qualifying facilities are providing energy during crucial on-peak demand periods. This information will also allow the Commission to accurately describe and detail the output of those qualifying facilities utilizing the time-of-day classification.

The Hearing Examiner, in his review of 4 MCAR §§ 3.0453 B and C, found that it is necessary for the Commission to be aware of the impact of net energy billing qualifying facilities on each utility and on the energy network in the state. He also found that the most cost efficient way for the Commission to fulfill both its reporting requirements and its role in fostering cogeneration and small power production is for the Commission to require the filing of such information relative to such qualifying facilities.

The Hearing Examiner also recommended that the Commission add language to this section specifically stating that the word "type" refers to the energy source of the qualifying facility.

In accord with the Hearing Examiner's recommendation, the Commission has added the phrase "by energy source" to the section to reduce any possible uncertainty or ambiguity.

The Commission adopts the findings of the Hearing Examiner and concludes that the need for and reasonableness of 4 MCAR §§ 3.0453 B and C has been adequately demonstrated. The Commission further concludes that the amendments to these sections do not constitute a substantial change within the meaning of 9 MCAR § 2.111.

D. Wheeling.

4 MCAR § 3.0453 D requires that the utility file with the Commission a summary of wheeling activities undertaken by the utility.

The Commission discussed this section in the Statement in the following manner:

> The utilities are also required to submit a summary of all wheeling activities. Such information is needed to determine the extent of the wheeling of energy generated by qualifying facilities and to evaluate the attendent problems or concerns thereof by all interested parties.

The Commission amended this portion of the rules as initially proposed by limiting the reported information to those activities undertaken with respect to qualifying facilities. This amendment was discussed by the Commission in the Comments in the following manner:

> The purpose of this recommended change is to specify that only wheeling activities which are undertaken with respect to qualifying facilities are to be reported. The Commission never intended to require a utility to report wheeling activities not associated with qualifying facilities. This change clarifies that intention.

The Hearing Examiner found this provision of the rules as finally proposed to be necessary and reasonable. He also found the amendment did not constitute a substantial change within the meaning of 9 MCAR § 2.111:

> Limiting the report to those wheeling activities undertaken with respect to qualifying facilities was done to clarify the original intent of the Commission and make explicit what was prevoiusly implicit only in the proposed rule. The subject matter of Minn. Stat. § 216B.164 (1981 Supp.), is cogeneration and small power production and the responsibility of the Commission with respect thereto. The Commission has no regulatory authority over wheeling activities undertaken outside of the context specified in Minn. Stat. § 216B.164 (1981 Supp.). Such activities are regulated by FERC. In the absence of authority for the Commission to regulate all wheeling activities, it is both necessary and reasonable to limit the reporting to the Commission of wheeling activities to those wheeling activites over which it has jurisdiction. (See, Pub. Ex. 6, NSP; Pub. Ex. 65, Ottertail Power Company; and Pub. Ex. 117, MMUA Reply Comments, p. 9).
>
> Since the amendment merely restricts the application of the rule benefitting the only party even possibly affected without adverse impact on any other potentially interested party, and is a logical outgrowth of the hearings adequately supported in the record, the amendment to § 3.0453 D. does not constitute a substantial change within the meaning of 9 MCAR § 2.111.

The Commission adopts the findings of the Hearing Examiner and concludes that the need for and reasonableness of 4 MCAR § 3.0453 D has been adequately demonstrated. The Commission further concludes that the amendments to this section do not constitute a substantial change within the meaning of 9 MCAR § 2.111.

E. Major impacts.

F. Effectiveness.

4 MCAR §§ 3.0453 E and F allow utilities to submit information relative to the major impacts of cogeneration and small power production on its utility system and the effectiveness of the cogeneration statute and the Commission's rules as observed by the utility.

The Commission discussed these provisions in the Statement in the following manner:

> The utilities are also required to include in their reports:
>
> A) A statement of any major impacts that cogenerators and small power production has had on the utility system; and

B) A statement of the effectiveness of M.S. § 216B.164 and the Commission's rules in encouraging cogeneration and small power production.

Both statements present an opportunity for the Commission to receive comments and information concerning cogeneration and small power production, as well as an opportunity for the utilities to submit their concerns, observations and subjective evaluations to the Commission for its consideration and evaluation.

The Commission amended the provision as initially proposed by making the filing of such information permissive rather than mandatory. The Commission discussed the amendments in the Comments in the following manner:

> It is recommended that these provisions of the rule be changed to remove the requirement that utilities submit reports concerning the major impact of qualifying facilities and the effectiveness of M.S. § 216B.164 and 4 MCAR §§ 3.0450-3.0463. The purpose of these changes is to reduce the administrative burden on reporting utilities. This is responsive to comments that the Commission's proposed rules are unduly burdensome on the utilities. At the same time, the rule provides utilities with an opportunity to express their opinions to the Commission on these matters.

The Hearing Examiner discussed 4 MCAR §§ 3.0453 E and F in the following manner:

> The Commission, pursuant to Minn. Stat. § 216B.164, subd. 7 (1981 Supp.), has the responsibility of reporting to the Legislature on the major impacts of cogeneration and small power production and on the effectiveness of regulation of qualifying facilitiess. Since utilities are substantially affected by the existence of cogenerators and small power producers, it is reasonable to afford such utilities an official opportunity to contribute to the Commission's assessment of the role of cogeneration and small power production in Minnesota. Since the purpose of the information is to afford the utilities some voice in Commission views, it is reasonable to make the filing of such information only optional. The change from a mandatory to permissive filing of the information herein discussed was a response by the Commission to comments of public witnesses that portions of the proposed rules imposed undue burdens on the utilities without offsetting regulatory benefits. If a utility does not wish to express its opinions on cogeneration and small power production to the Commission, it should not be required to do so.
>
> Since the only party affected by the change is benefitted thereby without any possibility of adverse impact on any other potentially interested party and the change is a logical outgrowth of the hearing process adequately supported in the record, the amendment to §§ 3.0453 E and F making the filing of information relative to the opinions of the utilities on cogeneration and small power production optional is not a substantial change within the meaning of 9 MCAR § 2.111.

The Commission adopts the findings of the Hearing Examiner and concludes that the need for and reasonableness of 4 MCAR §§ 3.0453 E and F has been adequately demonstrated. The Commission further concludes that the amendments to these sections do not constitute a substantial change within the meaning of 9 MCAR § 2.111.

4 MCAR § 3.0454 Conditions of service.

The Commission's Statement contained the following discussion of this rule as a whole:

> This proposed rule establishes the conditions which must be met by both the utility and the qualifying facility for engaging in interconnected operations. It is necessary because established conditions enable each party to know in advance what is expected of it and the other party. That knowledge greatly reduces uncertainty. It is reasonable to expect that reduction of uncertainty will encourage cogeneration and small power production. In addition,

established conditions ensure uniform treatment of ifying facilities by utilities, and provide a basis for resolving disputes. This proposed rule is reasonable because it fairly assigns responsibility for meeting conditions between the utility and the qualifying facility.

The Examiner elected to discuss this rule section-by-section, and he made no response to this part of the Statement. The Commission will do likewise.

A. Requirement to purchase.

The rule as adopted differs from the rule as initially proposed in two ways. First, the conjunction has been changed to require utilities to purchase "energy and capacity", instead of "energy or capacity", from qualifying facilities. Second, the reference to the set of rules governing cogeneration and small power production has been revised because the Commission is not adopting 4 MCAR § 3.0463.

The Commission included the following discussion of the need for and reasonableness of this section in its Statement:

> This section requires the utility to purchase electricity from any qualifying facility agreeing to the conditions. The requirement to purchase is necessary because a utility which refused to purchase could leave the qualifying facility without a market for its power. A possible result could be that more efficient generation (by the qualifying facility) would be foregone for less efficient generation (by the utility). Such a result would be contrary to the most basic reason for encouraging cogeneration and small power production: promoting efficient use of resources. The requirement for utilities to purchase from qualifying facilities is part of both PURPA (Section 210 (a)) and the FERC rules (18 CFR § 292.303(a)). This section is reasonable in that it also requires qualifying facilities to agree to the conditions established in this rule.

The Examiner concentrated on the need to change "or" to "and" in his Report:

> Section 3.0454 requires that a utility purchase from a QF all "energy or capacity" offered for sale under the conditions set forth in the proposed rules. The requirement that a utility purchase all energy and capacity made available to it by a QF in accordance with governing legal standards is mandated by state statute. Minn. Stat. § 216B.164, subd. 4(b) (1981 Supp.).
>
> A number of public witnesses commented that the use of the word "or" rather than the use of the word "and" in line 2 of § 3.0454 A. conflicts with governing state and federal statutes. (See, Pub. Ex. 6, NSP, p. 9; Pub. Ex. 65, Ottertail Power Company, p. 8; Pub. Ex. 88, Interstate Power Company, p. 3; and Pub. Ex. 118, NSP Reply Comments). While a rule requiring that the utility purchase the energy and capacity made available by a QF is necessary as a consequence of federal and state law, the rule, as stated, is an unreasonable response to that need in that the usage of the word "or" between the word "energy" and the word "capacity" in the second line of § 3.0454 A. may rationally be construed as varying the legal responsibility of the utility to purchase both energy and capacity. The statute requires that available energy and capacity rather than energy or capacity be purchased.
>
> To remedy the defect, the Commission should substitute the word "and" between the word "energy" and the word "capacity" for the word "or" in line 2 of § 3.0454 A.

In the rule as adopted, the Commission has followed the Examiner's recommendation, and substituted "and" for "or." It is clear from the Statement that the Commission was not proposing to limit purchases to either energy or capacity. The Commission concludes that the need for and reasonableness of this section of the rule as adopted have been adequately demonstrated, and that the substitution of "and" for "or" does not result in a substantial change within the meaning of 9 MCAR § 2.111.

B. Written contract.

The Statement contained the following discussion of this section:

Interconnection implies the purchase and sale of energy and capacity by the utility and the qualifying facility over substantial periods of time. Neither the transactions nor the physical equipment necessary to accomplish the transactions are simple. It is both necessary and reasonable, therefore, that the parties to the transactions state their understanding of the terms and conditions in writing. This statement will prevent disputes from arising and will aid in the resolution of disputes.

Some persons have argued that requiring a contract would be in itself a significant discouragement to potential owners of qualifying facilities. The argument suggests both that unnecessary costs of legal review would be incurred and that utilities would unilaterally make unfair requirements of qualifying facilities in such contracts.

The Commission believes this argument is without merit. First, a written contract is a reviewable document. It, therefore, discourages unreasonable demands which might otherwise be made in oral agreements. Second, a written contract tends to make each party explicitly aware of its rights and obligations. Third, written contracts better enable the Commission to ensure uniform treatment of qualifying facilities by utilities. Fourth, standard written contracts, especially for small qualifying facilities, will effect significant administrative cost savings, as the contract need not be redrawn each time a qualifying facility applies for interconnection.

The Examiner found this section necessary and reasonable:

Section 3.0454 B. requires that a QF and a utility execute a written contract prior to interconnection of the QF. It is necessary that the respective legal obligations and business relationship between the QF and the utility be specified for certitude, clarity, and the protection of all involved parties and ratepayers. (See Statement of Need and Reasonableness, pp. 18-19). The Commission has proposed a written contract as the instrument for expressing the business relationship between the QF and the interconnected utility. A written contract is, of course, the normal means or specifying legal obligations.

A number of public witnesses, generally utilities, strongly favored the requirement of a written contract. (see, e.g., Pub. Ex. 4, Eicher, p. 8; Pub. Ex. 6, NSP, p. 9; Pub. Ex. 10, Minnesota Power, p. 4; Pub. Ex. 65, Ottertail Power Company, p. 15; Pub. Ex. 88, Interstate Power, p. 3; and Pub. Ex. 118, NSP Reply Comments, p. 10).

While cogenerators and small power producers did not dispute the need for certitude in the respective legal obligations of the parties, they suggest that the experience of small cogenerators and small power producers with the unilateral bargaining power of the utilities makes it more reasonable for the Commission to dispense with the requirements of a written contract. They suggested that the Commission generate and approve as part of its regulatory mechanism a uniform statewide contract. (See, Pub. Ex. 100, Senator Marion Menning; and Pub. Ex. 113, Jacobs Wind Electric Co., Reply Comments, p. 6).

As demonstrated by NSP, however, the formulation and unilateral imposition of a stated contractual relationship on all QFs and utilities, even if legally permissible, is practically impossible. (See, Pub. Ex. 118, NSP Reply Comments, p. 10). Moreover, there is no specific legal authority for the Commission to first formulate and then uniterally impose on all QFs and utilities a uniform statement of tneir respective legal obligations. The Hearing Examiner accepts the occurrence of instances of rapaciousness and the use by certain utilities of unilateral bargaining power in past relationships with QFs. He find, however, that the combination of the execution of a written contract which may not alter the respective obligations of the parties enumerated in federal and state statutes and regulations with the ability of a prospective QF to bring a specific dispute concerning a proposed contractual provision to the Commission for resolution, pursuant to § 3.0460, where the burden of proof will be on the utility, provides adequate protection to a QF.

The requirement of a written contract between a QF and a utility is both necessary and reasonable.

The Commission adopts the Examiner's findings, and concludes that the need for and reasonableness of this section have been adequately demonstrated.

C. Compliance with national electrical safety code.

The Commission included the following discussion in its Statement:

Safe handling of electricity is vital to qualifying facilities, to utilities, and to the general public. In an early draft submitted for comment the Commission proposed to require the qualifying facility to comply with the National Electrical Safety Code. One manufacturer of small power production equipment objected that adherance to the Code could damage his equipment. The Commission has determined, therefore, that a reasonable requirement would be for the interconnection to meet Code specifications. The Commission notes that the Minnesota State Board of Electricity has asserted its jurisdiction over safe wiring of qualifying facilities.

The Examiner found that this section was both needed and reasonable:

Section 3.0454 C. requires that the interconnection between the Qualifying Facility and the utility comply with the requirements of the National Electrical Safety Code, 1981 Edition. It is necessary for purposes of safety that an interconnection meet generally recognized safety standards. It is reasonable that the interconnection be accomplished in compliance with the generally accepted electric safety code.

Northern States Power Company suggested that additional specific codes be referenced. (Pub. Ex. 118, NSP Reply Comments, p. 10). The legitimate concern expressed by NSP is fully answered by § 3.0462 J.

Section 3.0454 C. is both necessary and reasonable.

The Commission adopts the Examiner's findings, and concludes that the need for and reasonableness of this section have been adequately demonstrated.

D. Responsibility for apparatus.

In the rule as adopted this section has been revised in accordance with the Examiner's recommendation by deleting the last sentence of the rule as initially proposed.

The Statement discussed this section as follows:

This section requires qualifying facilities to install, operate, and maintain equipment required for safe and reliable generation in parallel with the utility, or, in the alternative, to pay the utility to install, operate and maintain the equipment. It is a necessary condition that the qualifying facility pay for interconnection costs. This is a requirement of state law (M.S. § 216B.164, subd. 8) and of the FERC regulations (18 CFR § 292.306), and is logically consistent with the purpose behind requiring utilities to pay full avoided cost to qualifying facilities. Payment of full avoided cost ensures that, in a "frictionless" world, all cogeneration and small power production which is more efficient (i.e., cheaper) than marginal utility production will come into being. All incremental efficiency gains are manifested as profits of qualifying facilities. The utility ratepayer then pays exactly as much for electricity generated by qualifying facilities as he would have if the utility had generated it all. He is thus economically indifferent between the sources. If, however, he were required, through his utility, to pay interconnection costs as well as full avoided costs, he would no longer be indifferent, but would be better off if the utility generated all its electricity and purchased none from qualifying facilities. It is, therefore, reasonable that the qualifying facility be responsible for this interconnection equipment.

The utility may nevertheless have knowledge and expertise about interconnections which it would not be cost effective for the owner of the qualifying facility to acquire. The utility may also be able

to purchase interconnection equipment at lower prices than may be available to individuals. Consequently, it is reasonable to require the utility to install, operate, and maintain interconnection equipment if requested by the qualifying facility, provided the utility is reimbursed for its costs.

The Examiner discussed this section as follows:

> Section 3.0454 D. requires that the Qualifying Facility furnish, install, operate and maintain, without cost to the utility, apparatus required by the Qualifying Facility to operate in accordance with Schedule D. The rule additionally requires a utility, at the option of the QF, to provide, install and operate at cost, the equipment required for the QF to provide safe and reliable generation in parallel with the utility.
>
> It is necessary that the responsibility for payment of interconnection costs be fixed. Except as otherwise expressly provided, governing federal and state law require a QF to bear interconnection costs. As a consequence of both governing law and reasonable equity between the QF and the utility's ratepayers, therefore, the initial sentence of § 3.0454 D. is both necessary and reasonable.
>
> The second sentence of § 3.0454 D. requiring a utility to purchase, install and operate such equipment at cost at the request of the QF is assertedly necessary and reasonable because the utility has superior expertise which would not be cost effective for the QF to utilize otherwise. (See, Statement of Need and Reasonableness, p. 19).
>
> There are no facts adduced in the record supporting the assumption by the Commission that this sentence of subpart D. is responsive to a legitimate concern.
>
> A number of public witnesses testified that the broad language of this portion of the proposed rules may require a utility to completely staff and provide spare parts and repair equipment to its QFs. (See, Pub. Ex. 4, Eicher, p. 9). The MMUA testified that the requirements of this portion of the rule would place an undue burden on a smaller utility in that it typically does not have available personnel experienced in installing operating and maintaining those portions of a QF's apparatus required for it to operate in accordance with Schedule D. (Pub. Ex. 117, MMUA Reply Comments, p. 10).
>
> To correct the defect, the Commission should either delete the final sentence of § 3.0454 D., or reconvene the hearings to develop a record to support the need and reasonableness of such a requirement.

The Commission adopts the Examiner's findings, and concludes that the need for and reasonableness of this section of the rule as adopted have been adequately demonstrated.

The Commission finds, with respect to the deleted sentence, that potentially interested parties had notice that the issue of financing interconnection costs would be considered in the proposed rulemaking. Moreover, the Notice of Hearing informed potentially interested parties that, as a consequence of the hearing, any portion of the proposed rules might be altered. Finally, the Commission finds that the deletion is fully supported in the record, and is a logical outgrowth of the rulemaking proceeding. The Commission concludes that the revision is not a substantial change within the meaning of 9 MCAR § 2.111.

E. Liability insurance.

As initially proposed, this section of the rules read, "A utility or qualifying facility shall not require the procurement of liability insurance as a condition of service." In the Statement, the Commission discussed the issue of whether or not a qualifying facility should be required to procure liability insurance as a precondition to interconnected operation as follows:

> In the development of these proposed rules, few issues have generated as much controversy as has the question of whether utilities may require qualifying facilities to hold liability insurance.

Utilities have generally taken the view that the nature of their business makes them prime targets for persons seeking liability damage awards. In their view, interconnection with cogenerators and small power producers reduces the utility's control over its transmission and distribution system, and may, therefore, increase its exposure for liability. At the same time, utilities have feared that even if a qualifying facility is clearly at fault, it is the utility which will be sued, both because of the direct physical connection with the utility and because of the greater certainty of payment if damages are awarded. Utilities have, therefore, often demanded that qualifying facilities purchase liability insurance - usually in amounts of $500,000 to $1 million - as a condition of interconnection.

Owners and manufacturers of qualifying facilities, on the other hand, have taken the position that the real reason for requiring liability insurance is to discourage and inhibit cogeneration and small power production. They have argued either that such insurance is simply not available, or is available at a cost which is prohibitively high. The result in either case, they have said, is the same as having the utility simply refuse to interconnect and purchase power.

The Commission observes that there is little practical experience of the effects of interconnected cogenerators and small power producers on utility power supply systems. Consequently, there is no information of which the Commission is aware on how often interconnected operations cause damage (if ever), or on the size of claims won because of such damages. It is, therefore, impossible for the Commission to determine how much liability insurance would be appropriate if insurance were required.

The Commission believes that a prudent person, engaging in a business venture to supply a product as potentially dangerous as electricity, would want to secure liability protection. Nevertheless, the Commission feels it is appropriate for each owner of a qualifying facility to make his own judgment on this issue. It is likely that if an uninsured qualifying facility were successfully sued, the news would get out to other qualifying facilities, and might influence those without protection to seek it.

The Commission concludes, therefore, that it would be both unnecessary and unreasonable to require liability insurance as a condition of service. Section E. of this proposed rule makes this clear.

During the hearings, the Commission heard considerable testimony on this issue. As a result of that testimony, the Commission proposed the following altered text for this section, "A utility or qualifying facility may require proof of coverage or the procurement of a reasonable amount of liability insurance as a condition of service."

The Commission revised its supporting rationale in the Comments to read:

In the development of these proposed rules, few issues have generated as much controversy as has the question of whether utilities may require qualifying facilities to possess liability insurance.

Utilities have generally taken the view that the nature of their business makes them prime targets for persons seeking liability damage awards. In their view, interconnection with cogenerators and small power producers reduces the utility's control over its transmission and distribution system, and may, therefore, increase its exposure for liability. At the same time, utilities have feared that even if a qualifying facility is clearly at fault, it is the utility which will be sued, both because of the direct physical connection with the utility and because of the greater certainty of payment if damages are awarded.

Owners and manufacturers of qualifying facilities, on the other hand, have taken the position that the real reason for requiring liability insurance is to discourage and inhibit cogeneration and small power

production. They have argued either that such insurance is simply not available, or is available only at a cost which is prohibitively high. The result in either case, they have said, is the same as having the utility simply refuse to interconnect and purchase power.

Public testimony, as submitted for the record during the hearings, indicated that liability coverage was easily obtainable and relatively inexpensive.

The Commission also believes that by requiring a manual disconnect switch and by prohibiting the execution of a hold harmless clause as a condition of service, the amount of risk exposure is effectively reduced to the point that the cost of obtaining insurance should not be prohibitive nor burdensome.

The Commission is of the opinion that a prudent person, engaging in a business venture to supply a product as potentially dangerous as electricity, would want to secure liability protection. The Commission believes that all owners, not just the prudent ones, should have liability coverage to guard against the possibility of harm to others and any resulting legal claims in the event of an accident due to negligence on the part of an individual qualifying facility owner. Without insurance or liability coverage, an injured person could, for all practical purposes, be left without legal recourse or recovery should the party at fault be without financial assets or adequate liability coverage. The Commission believes further that liability coverage is necessary to relieve severe economic distress of uncompensated victims of such accidents within the state by allowing the utility to require the maintenance of liability coverage as a condition of service. This position is essentially analogous to the rationale supporting the Minnesota no-fault automobile insurance act (M.S. § 65B.41 ff). The Commission concludes, therefore, that it is both reasonable and necessary to allow parties to require liability coverage as a condition of service.

The Commission observes that there is little practical experience of the effects of interconnected cogenerators and small power producers upon utility power supply systems. Consequently, there is no information of which the Commission is aware on how often interconnected operations cause damage (if ever), or on the size of claims won because of such damages. The Commission would not object to a recommendation by the Examiner of a specific dollar amount of insurance based upon the Examiner's review of the record.

The Examiner noted that this section as finally proposed took a position opposite to the section as originally proposed, but found that the procurement of insurance is a reasonable means of obviating the impact of a particular risk. He found evidence in the record which showed that interconnection with at least certain types of qualifying facilities posed a peculiar safety hazard, in that wind power production equipment has the potential to self-energize.

Examiner Campbell concluded that the rule as finally proposed was necessary when the peculiar risk imposed upon a utility by the operation of certain cogeneration activities was seen in concert with the inability of the utility to require a qualifying facility to demonstrate financial responsibility and with the possibility of a financially irresponsible qualifying facility beginning interconnected operations for a minimal expense.

However, the Examiner found that the section as finally proposed failed to respond to the documented need and did not avoid the potential for abuse. He objected to the Commission's requirement that a "reasonable amount" of insurance be provided, and concluded that, in order for the section to satisfy the statutory requirement of demonstrated reasonableness, that it must be reasonably specific and specify a maximum dollar amount of coverage. He felt the record would support a required coverage up to $300,000.

The Commission agrees. As stated in the Comments, the Commission had no objection to a specific dollar amount, based upon the Examiner's review of the record. The Commission adopts the Examiner's findings relating to the need to protect participants from the physical risk and the finalcial risk of interconnected operations, relating to the availability of insurance coverage

up to $300,000 under personal liability and homeowners' coverages without an umbrella liability policy, relating to the need to assure that utilities do not attempt to impose chrushingly large insurance requirements, and relating to the unreasonableness of forcing individual determination of "reasonable levels" of insurance coverage.

The Commission concludes that its adopted language of this section, specifying $300,000 as the maximum allowable required coverage, with the option for a utility to require less if circumstances warrant, is necessary and reasonable.

The Examiner also found that amending the rule as the Commission has now done would not result in a substantial change. He said:

> The correction of the defect found by the Hearing Examiner in this portion of the proposed rules would not result in a substantial change within the meaning of 9 MCAR § 2.111.
>
> The primary test of the presence of a substantial change is a lack of adequate notice so that a potentially interested party could present his views on the record. See, e.g., United Steel Workers of America v. Marshall, 647 F.2d 1189 (D.C. Cir. 1980); American Iron & Steel Institute v. EPA, 568 F.2d 284, 293 (3rd Cir. 1977). While the rule, as initially proposed, prohibited the requirement of insurance coverage, the presence of the provision advised potentially interested parties that the issue of an insurance requirement would be considered in the proposed rulemaking. Moreover, the Notice of Hearing informed potentially interested parties that, as a consequence of the hearing, any portion of the proposed rules might be altered. The Statement of Need and Reasonableness issued by the Commission with respect to its proposed rules admitted the presence of a need but a lack of documentation as to the amount of coverage to be required. (See Statement of Need and Reasonableness, p. 20). It is also important to note that the proposed rules involve an entirely new subject matter and do not concern amendments to existing rules under which persons may have vested interests. Finally, the amendment to the rules is fully supported in the record and is a logical outgrowth off the rulemaking proceeding. South Terminal Corp. v. EPA, 504 F.2d 646, 659 (1st Cir. 1974).

The Chief Hearing Examiner stated, in a Memorandum attached to his Report which approved the Examiner's Report, that he believed this section to have been substantially changed after being initially proposed. He felt the fundamental or basic thrust of the rule had been reversed, but believed he was without authority, under M.S. § 15.0412 (now M.S. § 14.15, subd. 3) to insert a "negative" finding.

The Commission agrees with the Examiner's findings. 9 MCAR § 2.111 prescribes the four criteria which the Examiner is to use to evaluate whether there has been a substantial change in the rule. The Examiner is to, "... consider the degree to which it:

> A. Affects classes of persons not represented at the previous hearing; or
>
> B. Goes to a new subject matter of significant substantive effect; or

C. Makes a major substantive change that was not raised by the original Notice of Hearing in such a way as to invite reaction at the hearing; or

D. Results in a rule fundamentally different from that contained in the Notice of Hearing."

The Commission finds that the change to this section will not effect any class of person not represented at the hearings. Persons on both sides of this issue gave considerable testimony at the hearings including testimony sponsored by a manufacturer of small power production equipment in support of a $300,000 level of insurance, and the Commission concludes that no additional classes of persons are likely to be affected by this section.

The Commission finds that the change to this section does not go to a new subject matter of significant substantive effect. Rather, it continues to address the same subject matter, that of how to respond to the additional risk imposed upon a utility by interconnected operations, and merely resolves the issue in a fashion different than first proposed.

The Commission finds that the change to this section does not make a major substantive change that was not raised in the Notice of Hearing in such a way as to invite reaction at the hearing, since the Notice of Hearing, at 7 S.R. 115, referred potential participants to the complete text of the proposed rules, and at 7 S.R. 116, advised all interested parties that the proposed rules might be modified as a result of the hearing process. In addition to that Notice, the Statement of Need and Reasonableness clearly indicated the Commission's awareness of both sides of this issue and the fact that it had preliminarily made a choice against requiring insurance. The Commission concludes that it advised potential participants that the issue of insurance had been considered and was highly controversial.

The Commission finds the change to this section does not result in a rule fundamentally different from that contained in the Notice of Hearing. While the issue of insurance is certainly important, it is not a fundamental component of the rules as a whole. The Commission could have proposed, and could adopt, rules that did not address the issue of insurance, and let that issue be settled between the interconnecting parties. In this respect, the insurance issue is quite different from the basic, fundamental issues of mandatory interconnection and purchase or the rates for purchase. At the worst, the change to this section will alter the calculation of revenues and expenses that a potential qualifying facility would carry absent the requirement of the rule, and will be a small portion of the total costs of becoming a qualifying facility.

The Commission adopts the Examiner's conclusion that the change to this section of the rule is not a substantial change, both for the reasons advanced in his Report and those outlined above.

F. Legal status not affected.

4 MCAR § 3.0454 F, as initially proposed, stated that the rules do not affect the legal liability, rights, or status of any party under existing law.

This section was amended to include a provision stating that no party may require the execution of an indemnity or hold harmless clause as a condition of interconnection.

The Commission, in the Statement, discussed the rule as initially proposed as being a necessary and reasonable warning of the fact that no responsibility or liability would be removed from any party.

The Commission further discussed the provision in its comments as follows:

> It is generally recognized that the inherent nature of an interconnection agreement between a qualifying facility and a utility results in unequal bargaining power. Typically, the utility will be in a superior bargaining position. The utility may utilize its position to the detriment of the owner of the qualifying facility by requiring the execution of an indemnity clause. Such clauses have the capability of taking undue advantage of an unsuspecting owner and subjecting him to open ended liability. In such a case, the utility has effectively transferred all risk to the qualifying facility. Testimony was received during public hearing to the effect that insurance companies are reluctant to write liability coverage for open ended indemnity clauses or that to do so requires higher premiums than would otherwise be present without such a clause. To be required to purchase a liability policy covering an open ended indemnity clause would place an inordinate financial burden upon the owner of a qualifying facility.

The Hearing Examiner found 4 MCAR § 3.0453 F necessary and reasonable as a result of the unequal bargaining power between the utility and a qualifying facility as well as the demonstrated proclivity on the part of the utility to shift the liability of the utility to the qualifying facility. He also noted as being significant the fact that broad indemnity clauses, currently required by utilities, may have the effect of voiding any insurance possessed by the qualifying facility.

The Hearing Examiner also found the amendment to 4 MCAR § 3.0454 F not to be a substantial change within the meaning of 9 MCAR § 2.111. The Hearing Examiner reasoned that the prohibition against indemnity and hold harmless clauses was implicit in the rule as initially proposed and that the amendment merely expressly provided so.

The Commission adopts the findings of the Examiner and concludes that the need for and reasonableness of this section has been adequately demonstrated. The Commission further concludes that the amendments to this section do not constitute a substantial change within the meaning of 4 MCAR § 2.111.

G. Payments for interconnection costs.

As initially proposed, this rule section enabled a qualifying facility to require a utility to finance the interconnection over the duration of the contract. The Statement had this discussion:

> Interconnection costs could, in some circumstances, amount to a very considerable sum. Because qualifying facilities may already be experiencing large capital requirements prior to beginning operations, the requirement to pay interconnection costs "up front" as well could cause a potential owner of a qualifying facility to decide not to proceed with the project. In that case, cogeneration and small power production would have been discouraged simply through the timing of payments. The FERC recognized this possibility and gave State regulatory authorities responsibility for determining the manner of payments for interconnection costs, expressly including the possibility of reimbursement over a reasonable period of time (18 CFR § 292.306 (h). The Commission believes that a period equal to the time covered by the contract between the utility and the qualifying facility is a reasonable period, as all other rates, terms, and conditions are covered over the same period.
>
> Some qualifying facilities may nevertheless find it advantageous, perhaps for tax purposes, to pay all interconnection costs as they are incurred. It is, therefore, reasonable to do as this section of the proposed rule

has done, and offer the qualifying facility its choice of the two possibilities. Because it is not possible for the Commission to foresee the circumstances of all qualifying facilities and utilities facing interconnection under these rules, it is also reasonable to allow both parties to agree to some payment schedule other than the two specific ones the qualifying facility is entitled to.

Whenever payments for interconnection costs are spread over a period of time, an additional cost - the cost of capital - is incurred. This cost would not exist without the interconnection and the qualifying facility's election not to pay all interconnection costs at once. Consequently, this cost of capital is appropriately classified as an interconnection cost, and is the responsibility of the qualifying facility. The proposed rule is reasonable because it does not prohibit the utility from recovering this cost through charges to the qualifying facility.

As a result of the comments received at the hearings, the Commission determined that it would be improper to require the utility to finance the interconnection. In its Comments the Commission said:

This recommendation is responsive to a number of comments which said it would be unreasonable to require the utility to enter into the lending business. The change would render moot questions of whether credit checks may be required. The Commission is persuaded that a requirement to finance interconnection costs is not fundamentally different (except possibly in magnitude) from a requirement to finance any other part (or all) of a qualifying facility. Such a requirement would not be reasonable. The change recommended above would also serve to reduce the administrative burden of compliance on utilities.

The Examiner concurred:

Section 3.0454 G. states that payments for interconnection costs may be made when the costs are incurred according to any schedule agreed upon by the QF and the utility. The rule, as finally proposed, amended the rule as initially proposed by eliminating the option of the QF to require a utility to amortize the interconnection cost payments over the life of the contract.

The need for § 3.0454 G. results from the requirements of the FERC Rules. Such rules require a state commission to specify the manner in which interconnection costs are to be reimbursed and give the Commission the option to allow payments amortized over the life of the contract. 18 C.F.R. § 292.306(h).

There is no evidence in the record that would require or even support the option of a QF to require a utility to finance the QF's interconnection costs. The testimony overwhelmingly indicated that a utility should not be forced into a banking function to the detriment of its ratepayers. (See, e.g., Pub. Ex. 6, NSP, p. 11; Pub. Ex. 10, Minnesota Power Company, p. 5; Pub. Ex. 65, Ottertail Power Company, p. 10; Pub. Ex. 88, Interstate Power Company, p. 4; Pub. Ex. 117, MMUA Reply Comments, p. 11). The only comment on behalf of requiring an optional time payment provision was that of Jacobs Wind Electric Company. Such comments, however, merely assert the desirability of the result with no specific reasoning. (Pub. Ex. 16, Jacobs Wind Electric Co., p. 10).

In addition to the lack of facts in the record that would justify requiring an optional time payment plan, such a provision would have the undesirable effect of fostering under-capitalized QFs. If a QF could require the utility to finance any interconnection equipment, the QF would be substituting the credit of the utility for its own credit. Moreover, as Minnesota Power Company commented, interconnection equipment tends to be individualized and would be virtually useless to a utility upon repossession. (See, Pub. Ex. 10, Minnesota Power Company, p. 5).

Section 3.0454 G., deleting the option of time payments, is both necessary and reasonable.

The amendment to § 3.0454 G. does not constitute a substantial change within the meaning of 9 MCAR § 2.111.

The Commission adopts the Examiner's findings, and concludes that the need for and reasonableness of this section have been adequately demonstrated. The Commission also concludes that the revision to this section does not constitute a substantial change within the meaning of 9 MCAR § 2.111.

H. Types of power to be offered.

The Commission provided the following discussion of this section in the Statement:

> The FERC rules (18 CFR § 292.305 (b)) require utilities to offer maintenance, interruptible, supplementary, and back-up power to qualifying facilities upon request. The availability of these types of power may affect the economics of qualifying facilities such that it is necessary to provide them to encourage cogeneration and small power production. There is no requirement to provide these services below cost, so this condition is reasonable. It is also reasonable to only require these services to be offered on request. They are needed primarily by large cogeneration facilities. Many utilities, who will never interconnect with this kind of qualifying facility, or who will do so only several years from now, can save the time and expense of immediately establishing these services and charges if there is no blanket requirement.

The Examiner found there was a need for this section, and that the proposal was reasonable:

> Section 3.0454 H. requires that the utility offer maintenance, interruptible, supplementary and backup power to a QF upon request. Since governing federal rules require the furnishing of such types of power to a QF upon request, § 3.0454 H. is both necessary and reasonable. See 18 C.F.R. § 292.305(b).

The Commission adopts the Examiner's findings, and concludes that the need for and reasonableness of this section have been adequately demonstrated by the Statement.

I. Metering.

The rule as adopted has been revised from the rule as initially proposed to conform to the Examiner's findings and recommendations. In its Statement, the Commission included the following discussion of this section as initially proposed:

> Metering is another very controversial issue. Much, but not all, of the controversy centers on cost. There is also controversy over the ownership and control of information made available through metering.
>
> To understand the nature of the cost controversy and the Commission's proposed resolution of the issue, it is helpful to keep the following points in mind: 1. Meter costs are interconnection costs and by the logic of the FERC rules are the responsibility of the qualifying facility. 2. Although metering costs tend to be greater for larger, more sophisticated facilities, those costs are a more significant proportion of total interconnection costs for smaller, less sophisticated facilities. 3. Metering costs are far larger, relative to potential revenues, for small qualifying facilities than for large qualifying facilities. 4. Some owners of qualifying facilities intend to make money selling electricity to utilities. 5. Some owners of qualifying facilities simply want to reduce their dependence on utilities and reduce their electric bills.
>
> In enacting M.S. § 216B.164, the Legislature made a special provision for qualifying facilities having capacity less than 40 kilowatts. That provision, known as "net energy billing," makes the net flow of electricity between the qualifying facility and the utility during a billing period the basis of the bill calculation. A single watt-hour meter, capable of running accurately forward and backward, would be sufficient to measure the net flow of electricity, in both direction and magnitude. Most classes of utility customers are already metered for sales by the utility. Hence, if only a single meter were required, its cost would not exceed the cost the utility would incur in selling electricity to the qualifying facility as a nongenerating customer, and would, therefore, not be an interconnection cost. The result would be that the qualifying facility would not have to pay an explicit metering charge. (The cost of the meter, or some part of it, may already be reflected in the monthly service charge for which the qualifying facility remains responsible). The Commission believes it is reasonable to infer that the Legislature wanted to remove metering cost disincentives from small potential cogenerators and small power producers.

The Legislature nevertheless required the Commission to report "[t]he location, type and output of cogenerators and small power producers in the state . . ." Although "output" could mean a measure of capacity, in kilowatts, the Commission believes it would be more meaningful as a measure of energy, in kilowatt-hours. A single meter running forward and backward could not measure output in this sense, as it could not distinguish between two qualifying facilities, one of which purchased 400 kilowatt-hours and sold 600, and the other of which purchased 20,000 kilowatt-hours and sold 20,200. In either case, the meter would show a net flow of 200 kilwatt-hours to the utility. The effects of the two qualifying facilities on the utility's system could, however, be drastically different. The Commission believes it is reasonable, therefore, both to meet its narrow reporting requirement and to provide information relative to utility planning and broad public policy questions, to require metering which will measure total deliveries to and receipts from the utility system.

Several persons observed that a full measure of "output" can only be acnieved by metering the generator of the qualifying facility, because there may be load between the generator and the interconnection with the utility. Some suggested that the Commission's rules should permit the utility to install a third meter, at its own expense, if it wanted to monitor generator output.

Several owners and at least one manufacturer of qualifying facilities urged rejection of this suggestion. They claimed that the information sought was proprietary, and no one's business but theirs. They also feared utilities would make selective use of such information to discourage potential cogenerators and small power producers.

The Commission believes the information needed for utility planning, public policy, and its own reporting requirements is that information detailing the interaction of qualifying facilities and utilities. It is, therefore, not necessary to gather information on the output of the generator; energy flows at the point of interconnection will do. Nothing in the proposed rule prevents a utility from installing a third meter, either at its own expense or at the expense of the qualifying facility, if it is agreeable with the qualifying facility.

This section of the proposed rule requires the utility to meter the qualifying facility to obtain the data it must report to the Commission. It requires the qualifying facility to pay for the metering unless the qualifying facility is operating under net energy billing, in which case the utility must provide the additional metering without cost to the qualifying facility.

This section is both necessary and reasonable. Even if there were no reporting requirements, and no public policy needs for the information, metering would still be necessary to document the transactions between qualifying facilities and utilities. The proposal fairly apportions those costs to qualifying facilities except where those costs, as recognized by legislative action, would put an undue burden on small qualifying facilities, and thus discourage small-scale cogeneration and small power production. The Commission believes that the possible effect of a limited increase in rates to other consumers who, ultimately, must pay those costs, would be counterbalanced by the benefits, including externalities, of encouraging cogeneration and small power production.

The Examiner found that this section was necessary, but would need revision to become reasonable:

Section 3.0454 I. requires that the utility meter the QF to obtain the data necessary to fulfill the utility's reporting requirements to the Commission. Unless the utility is operating under net energy billing, the cost for requisite metering is an interconnection cost to be paid for by the QF. If the QF is using net energy billing, the utility must provide a second meter to the Qualifying Facility without charge.

Section 3.0454 I. is necessary so that there may be an assignment of the costs of metering resulting from the reporting requirements of the Commission. It is reasonable to assign the costs of metering to the QF as an interconnection cost as defined in the proposed rules.

The requirement that a second meter be provided free of charge to a net energy billing QF, however, is not supported by the record. Even the Commission recognizes that, ordinarily, metering is a legitimate interconnection cost to be borne by the QF. (See Statement of Need and Reasonableness, p. 21). Such costs are additional costs arising solely from the fact of interconnected activity, and are peculiar to the QF. Minn. Stat. § 216B.164, subd. 8 (1981 Supp.), in relevant part provides:

> Nothing contained in this section shall be construed to excuse the qualifying facility from any obligation for costs of interconnection and wheeling in excess of those normally incurred by the utility for customers with similar load characteristics who are not cogenerators or small power producers . . . . (Emphasis added)

Since the cost of a second meter is one peculiar to a QF under net energy billing, under the definition of Interconnection costs contained in either the proposed rules or the FERC Rules, a second meter is an Interconnection cost. Pursuant to Minn. Stat. § 216B.164, subd. 8 (1981 Supp.), a QF must bear all interconnection costs.

The Commission, while not explicitly discussing Minn. Stat. § 216B.164 subd. 8 (1981 Supp.), apparently concluded that requiring a QF to bear the cost of a second meter would unduly inhibit the development of cogeneration and small power production. (Statement of Need and Reasonableness, p. 21-22). There is no evidence in the record, however, supporting that conclusion. In fact, there is no evidence that requiring a QF subject to net energy billing to provide its own second meter would have any effect on the economic viability of such cogeneration or small power production installations. There is not even any evidence in the record regarding the cost of the second meter. Finally, the availability of net energy billing is a decided benefit to a QF and goes beyond the requirements of PURPA. Hence, in the absence of demonstrated need for subsidization of interconnection costs, the QF obtaining the benefits of such enhanced rates should bear the reasonable costs associated with its preferred status.

The testimony on behalf of the utilities uniformly recommended deletion of the availability of a free second meter for customers under net energy billing. (See, Pub. Ex. 4, Eicher, p. 9; Pub. Ex. 5, Land O'Power Co-op., p. 4; Pub. Ex. 10, Minnesota Power Company, p. 6; Pub. Ex. 31, City of Adrian, p. 5; Pub. Ex. 65, Ottertail Power Company, p. 10; Pub. Ex. 88, Interstate Power Company, p. 4; and Pub. Ex. 117, MMUA Reply comments, p. 11-13).

The only statement supporting the proposed rule other than that of the Commission contains no factual support for the necessity of providing a free second meter to a customer under net energy billing and does not consider the Commission's statutory authority to adopt such a requirement. (See, Pub. Ex. 16, Jacobs Wind Electric Co., p. 11; Pub. Ex. 113, Jacobs Wind Electric Co., Reply Comments, p. 9).

Therefore, on the basis of the record herein, the requirement of § 3.0454 I. that a utility provide a net energy billing customer with a free second meter has not been demonstrated to be reasonable and within the Commission's statutory authority.

To remedy the defect, the Commission should insert a period in the second sentence of the subsection after the word "cost" and strike the last sentence of § 3.0454 I.

The Commission adopts the Examiner's findings and concludes that the need for and reasonableness of this section of the rule as adopted have been adequately demonstrated.

The Commission finds, with respect to the revision of the rule as initially proposed, that potentially interested parties had notice that the issue of the allocation of metering costs would be considered in the proposed rulemaking. Moreover, the Notice of Hearing informed potentially interested parties that, as a consequence of the hearing, any portion of the proposed rules might be altered. The Commission finds that this rule section involves an entirely new subject matter, and does not concern amendments to existing rules under which persons may have vested interests. Finally, the Commission finds that the deletion is fully supported in the record, and is a logical outgrowth of the rulemaking proceeding. The Commission concludes that the revision is not a substantial change within the meaning of 9 MCAR § 2.111.

J. Discontinuing sales during emergency.

This section as adopted has been revised from the rule as initially proposed by adding language suggested by the Examiner to clarify that recommencement of service after interruption must also not be discriminatory.

The Statement discussed this section as follows:

> This section is necessary to implement 18 CFR § 292.307 (b)(2). It is reasonable in that a qualifying facility must be treated on a nondiscriminatory basis in any load shedding program - i.e., on the same basis that other customers of a similar class with similar load characteristics are treated with regard to interruption of service.

The Examiner found it necessary and reasonable as presented, but nevertheless suggested a nonsubstantial revision:

> Section 3.0454 J. allows the utility to discontinue service to a QF during a system emergency if not done on a discriminatory basis. This section is necessary to implement 18 C.F.R. § 292.037(b)(2).
>
> It is reasonable in that a qualifying facility must be treated on a non-discriminatory basis in any load shedding program. (See Statement of Need and Reasonableness, p. 22; and Pub. Ex. 65, Ottertail Power Company, p. 11).
>
> While the proposed rule is both necessary and reasonable as presented, the Hearing Examiner suggests that the Commission consider adding language at the end of the subsection that a reconnection of service to the QF must also be done on a non-discriminatory basis. Although a discrimination against a QF as a customer of the utility may be subject to redress under other provisions of Minn. Stat. Ch. 216B (1980), and the Commission rules, the limited authority that the Commission possesses with respect to the service provided by a municipally-owned electric utility under Minn. Stat. § 216B.17 (1980), makes it appropriate for the Commission to consider including in this section of the proposed rules a prohibition against discriminatory delays in the resumption of service to a QF. Specific language to accomplish that end is suggested in Pub. Ex. 16, Jacobs Wind Electric Company, p. 12.
>
> The addition of language prohibiting discrimination against a QF in the recommencement of electric service would not constitute a substantial change within the meaning of 9 MCAR § 2.111.

The Commission adopts the Examiner's findings, and concludes that the need for and reasonableness of this section have been adequately demonstrated. The Commission concludes that the addition of language prohibiting discrimination against a qualifying facility in the recommencement of service does not constitute a substantial change within the meaning of 9 MCAR § 2.111.

K. Interconnection plan.

The Commission has revised the rule as initially proposed in accordance with the Examiner's recommendation.

The Statement discussed this section as initially proposed:

> Some owners and manufacturers of small qualifying facilities have maintained that there is no need to inform the utility that a small qualifying facility is coming on line. In their view, the physical effect of a small generator beginning to feed into the distribution system is the same as the effect felt when an electric motor of the same size is shut off. One is not required to tell the utility about the disposal of an appliance with an electric motor, so there should be no requirement to inform the utility about the acquisition of a small qualifying facility. These owners and manufacturers also admit to a revenue effect on the utility: as the qualifying facility generator takes part of the customer's load from the utility, the customer's bill and utility revenues fall. They argue that a person who replaces an electric water heater with a solar water heater causes the same effect, and does not have to inform the utility.

The Commission has considered these arguments, and has decided that the utility may require an interconnection plan. There are a number of reasons why the Commission believes this section of the proposed rule is necessary and reasonable. First, although the effects of very small qualifying facilities on the utility's system may be very small, these rules cover interconnections with qualifying facilities of all sizes. Interconnection with some of these will certainly require substantial modification of distribution systems, and perhaps transmission systems as well, and these modifications should be planned for. Second, as discussed above, the Commission has determined that it is both necessary and reasonable to collect data which is not available when a single meter runs both forward and backward. Consequently, the utility, which is responsible for gathering the information, must be told in advance that the interconnection will take place. The utility also needs to know the nature of the qualifying facility to anticipate its interconnection requirements. Finally, the Commission believes there is a fundamental difference between a retail utility customer and a qualifying facility which necessitates that the utility be informed in advance. That difference is that the qualifying facility injects power into the utility's system; the retail customer does not. Because the utility is responsible for providing power of a certain quality from its system to its users on demand, it has a legitimate need to know when someone other than itself is energizing its system.

This section of the proposed rule is reasonable as well as necessary. The interconnection plan which may be required is simple and straightforward, and will not be an undue burden on qualifying facilities. At the same time, it will provide the utility with the information it will need to arrange the interconnection smoothly.

The Examiner found that the section as proposed was necessary and reasonable. Nevertheless, he suggested that the Commission consider revising the section in accordance with a comment received during the hearings by setting a specific, reasonable lead time. He found such a revision would not constitute a substantial change:

> Section 3.0454 K. allows a utility to require the QF to submit an interconnection plan containing the technical specifications of the equipment, the proposed date of interconnection and the projection of net operative consumption by the QF prior to interconnection. No public testimony adverse to this provision was received. Since the interconnection of a QF will have an effect on the utility's system and the required information is readily available to the QF, § 3.0454 K. is both reasonable and necessary. (See Statement of Need and Reasonableness, p. 23; and Pub. Ex. 65, Ottertail Power Company, p. 11).
>
> The Commission may consider the suggestion of Ottertail Power Company that language be inserted in this portion of the proposed rule requiring that the information be supplied at least 30 days prior to the actual interconnection. Since the utility has need to know about the specific interconnection and the actions required of it prior to implementation, the inclusion of a reasonable lead time in the provision of the information prior to interconnection would be desirable. (See Pub. Ex. 65, Otttertail Power Company, p. 11).
>
> Requiring the submission of the interconnection plan not less than 30 days prior to the actual interconnection would not constitute a substantial change within the meaning of 9 MCAR § 2.111.

The Commission observes that a requirement to submit the interconnection plan "not less than 30 days prior to the actual interconnection" could be interpreted as permitting a utility to require a greater than 30-day lead time. This interpretation could provide an opportunity for a recalcitrant utility to attempt to harass the qualifying facility by requiring an unreasonably long lead time. The Commission has, therefore, revised the section to permit the utility to require submission of the plan not more than 30 days prior to interconnection. This language provides a reasonable lead time for utilities while eliminating the opportunity for harassment of qualifying facilities.

The Commission adopts the Examiner's findings, and concludes that the need for and reasonableness of this section of the rule as adopted have been adequately demonstrated. The Commission also concludes that the addition of language setting a reasonable period during which the plan must be submitted is not a substantial change within the meaning of 9 MCAR § 2.111.

4 MCAR § 3.0455 Rates for sales.

A. Rates to be governed by tariff.

The Commission discussed this section in its Statement as follows:

> This section requires utilities to sell electricity to qualifying facilities under standard retail tariffs. It is necessary to assure qualifying facilities that the Commission, not the utility, will set the rates for their purchase. It is reasonable in that it assures both qualifying facilities and other utility customers that neither group will be discriminated against relative to the other. It is also consistent with 18 CFR § 292.305(a)(ii).

The Examiner found this section to be needed and reasonable:

> Section 3.0455 A. requires that a utility, except as otherwise specifically approved by the Commission, sell electricity to Qualifying Facilities under the utility's standard retail rates. This provision is necessary to assure QFs that the Commission, not the utility, will set the rates for energy purchases by the QF. It is reasonable in that it assures both QFs and other utility customers that neither will be discriminated against relative to the other. Moveover, this portion of the proposed rule is consistent with 18 C.F.R. § 292.305(a)(ii).

The Commission adopts the Examiner's findings and concludes that the need for and reasonableness of this section have been adequately demonstrated by the Statement.

B. Petition for specific rates.

This section of the rule as adopted contains a revision to the rule as initially proposed. The revision was proposed by the Commission in its Comments to the Examiner.

The Statement discussed the rule as initially proposed as follows:

> This section enables any qualifying facility to petition the Commission to establish specific rates for supplementary, maintenance, interruptible, or backup power. It is necessary to establish a mechanism to develop rates for these types of power, which the utility must offer, on request, under 4 MCAR § 304.54 H. It is reasonable in that the initiative remains with the qualifying facility and in that the determination of an appropriate rate by the Commission need not necessarily await a general rate case for the utility.

Upon consideration of the comments received at the hearing, the Commission proposed adding language making explicit the utility's right to petition for specific rates. The Commission discussed this proposal in its Comments as follows:

> The Commission recommends the change shown above which explicitly permits the utility, as well as the qualifying facility, to petition for specific rates. Because regulated utilities may already petition the Commission to establish rates, the recommended change simply clarifies the application of the rule. This change is in response to a number of comments recommending it.

The Examiner found that section as finally proposed was necessary and reasonable:

> Section 3.0455 B. provides that either a QF or a utility may petition the Commission to establish a specific rate for supplementary, maintenance, backup, or interruptible power. The rule, as finally proposed, differs from the rule as initially drafted by allowing the utility the opportunity to petition the Commission for the establishment of such specific rates.
>
> A number of public witnesses commented on the desirability of specific allowing a utility to petition for the establishment of such rate. (See, e.g., Pub. Ex. 10, Minnesota Power, p. 7; and Pub. Ex. 4, NSP, p. 11).

Section 3.0455 B. is necessary in order to establish a mechanism to develop rates for the types of power that the utility must offer on request as a consequence of both the FERC Rules and § 3.0454 H. of the proposed rules.

It is reasonable in that either party to the interconnection may petition the Commission for the establishment of a specific rate. The option allowed a utility to so petition, as added by the amendment to the proposed rule, merely clarifies existing law. Since a regulated utility may already petition the Commission to establish rates for the provision of its electric service, the amendment merely clarifies the application of the rule.

The amendment to the proposed rule allowing a utility to petition for the establishment of a specific rate for the provision of electric service to a QF is declaratory of existing law and, as such, is not a substantial change within the meaning of 9 MCAR § 2.111.

The Commission adopts the Examiner's findings, and concludes that the need for and reasonableness of this section as adopted have been adequately demonstrated. The Commission also concludes that the amendment to the rule as initially proposed does not constitute a substantial change within the meaning of 9 MCAR § 2.111.

4 MCAR § 3.0456. Standard rates for purchases.

A. General.

This section describes the rate structure applicable to the sale of electric power by a qualifying facility to a utility. This section was explained in the Statement as follows:

> 18 CFR § 292.304 (c) provides that standard rates will apply for qualifying facilities with capacity of 100 kilowatts or less. This will eliminate the administrative burden that would exist if all rates were negotiated separately. Furthermore, this will insure that rates for purchase are made available on a nondiscriminatory basis to all qualifying facilities selling to a particular utility. The existence of a simple standardized rate schedule for purchases of energy by utilities will serve to encourage cogeneration and small power production by making relevant information available to potential qualifying facilities.
>
> Qualifying facilities with capacity of more than 100 kilowatts may negotiate contracts with the utility. This will allow the special circumstances of a large qualifying facility to be taken into account when rates for purchase are determined. This will not be unreasonably burdensome to the utilities because it can be expected that there will be a relatively smaller number of those types of qualifying facilities.
>
> The standard rates may be considered a floor price for qualifying facilities with capacity of more than 100 kilowatts provided they make commitments to provide firm electric power. In this sense, large qualifying facilities will be treated the same as smaller qualifying facilities. The requirement that large qualifying facilities provide firm electric power is necessary because the likelihood of diversity of load among large qualifying facilities is lower than the likelihood of diversity among smaller qualifying facilities. In addition, there would be a larger negative impact upon the utilities if the larger qualifying facility did not provide firm power (or a group of large qualifying facilities did not provide firm power, on average, after considering diversity) than if smaller qualifying facilities (taken as a whole with recognition of diversity) did not provide firm power because of the absolute size of the facilities.
>
> It is necessary that the qualifying facility specify its choice of one of the three types of standard rates in the written contract to insure clear communication between the parties involved. It is necessary that compensation to the qualifying facility be made either through a credit to its account with the utility or through direct payment by check. It is reasonable for the qualifying facility to

have the option to choose the method of compensation since the qualifying facility is, in effect, the seller of electricity and it is common business practice that the seller prescribe the terms of sale. It is desirable that both parties have a clear understanding of the chosen arrangement. Thus, it is reasonable that the option chosen be specified in the written agreement.

Finally, this section proposes that qualifying facilities continue to pay any monthly service charges and demand charges specified in the tariff under which they purchase electricity from the utility. This provision implements part of M.S. § 216B.164, subd. 8. It is a reasonable requirement because these fixed charges are designed to recover all or part of those costs of providing service which do not vary with the consumption of electricity, and which may not be avoided through the generation of electricity by the qualifying facility. If the qualifying facility were not required to pay these charges, the costs would have to be borne by the utility's other ratepayers through higher utility rates. This result would violate the Commission's mandate from the Legislature that cogeneration and small power production be encouraged consistent with protection of the ratepayers.

In the Comments, the Commission discussed one minor change made to the rules as initially proposed:

> The only recomended change in this section of the rule is the elimination of the word "electric" from the phrase firm electric power. The purpose of this recommended change is to make it clear that the Commission is referring to "firm power" as defined in these rules.

The Examiner found this section of the proposed rules both necessary and reasonable.

The Commission adopts the findings of the Examiner, and concludes that the need for and reasonableness of this section has been adequately demonstrated by the Statement and Comments.

B. Net energy billing rate.

B.1.

This section was described in the Statement as follows:

> M.S. § 216B.164 provides that net energy billing be available to qualifying facilities with capacity of 40 kilowatts or less. This section of the proposed rule does just that. In addition, this section restricts availability of the net energy option to customers not choosing to sell power on a time-of-day basis. The net energy billing option is designed for smaller scale cogeneration and small power production that wish to minimize their metering costs and sell as much energy as can be efficiently produced. On the other hand, the purpose of the time-of-day option, which is discussed in a following section of this statement, is to encourage cogenerators and small power producers to provide substantial amounts of on-peak power. However, the time-of-day option requires much more expensive metering which should be paid for by the qualifying facility. A large amount of on-peak power relative to off-peak power would have to be generated by the qualifying facility in order to pay for the more expensive metering. Since it is the Commission's purpose to only encourage cost-effective applications of the time-of-day purchase rates, this provision is efficacious.

The Examiner found this section of the proposed rules both necessary and reasonable.

The Commission adopts the findings of the Examiner, and concludes that the need for and reasonableness of this section has been adequately demonstrated by the Statement.

B.2.

This section requires that a utility bill a qualifying facility for the excess of energy supplied by the utility above energy supplied by the qualifying facility according to the utility's applicable retail rate schedule. The purpose of this section was explained in the Statement as follows:

This section is necessary in order to implement M.S. § 217B.164, subd. 4 which states the following:

> For qualifying facilities having less than 40 kilowatts capacity, the customer shall be billed for the net energy supplied by the utility according to the applicable rate schedule for sales to that class of customer.

This provision is reasonable because it treats qualifying facilities in the same way that it treats the utility's other customers.

The Examiner found this section of the proposed rules both necessary and reasonable.

The Commission adopts the findings of the Examiner, and concludes that the need for and reasonableness of this section has been adequately demonstrated by the Statement.

B.3.a.

This section of the proposed rules was explained in the Statement as follows:

> This section of the proposed rule provides that payments for excess energy delivered to the utility by a net energy billed qualifying facility of 20 kilowatts or less shall be at the energy rate of the utility's retail rate schedule for serving the facility. If the utility charges its customers 5¢ per kilowatt-hour on that schedule, the utility would pay 5¢ per kilowatt-hour for energy delivered by the qualifying facility in excess of energy offsetting the qualifying facility's consumption from the utility. This section also provides that if the utility has a blocked rate schedule (a fixed number of kilowatt-hours at one rate, more at a different rate), the lowest priced block shall apply.
>
> It is necessasry for the Commission to set the rates for payments to net energy billed qualifying facilities. M.S. § 216B.164, subd. 3, establishes net energy billing for qualifying facilities of less than 40 kilowatts. It includes this language:
>
> In the case of net input into the utility system by the qualifying facility, compensation to the customer shall be at a per kilowatt-hour rate set by the Commission. In setting these rates, the Commission shall consider the fixed distributiuon costs to the utility not otherwise accounted for in the basic monthly charge and shall ensure that the costs charged to the qualifying facility are not discriminatory in relation to the costs charged to other customers of the utility. Notwithstanding any other language to the contrary in this section, the Commission shall set the rates for net input into the utility system based on avoided costs as defined in 18 C.F.R. Section 292.101 (b)(6), the factors listed in 18 C.F.R. Section 292.304, and all other relevant factors.
>
> It is clear that the Commission must set the rates, that the rates must have a basis in avoided costs, and that the Commission must consider the utility's fixed distribution costs both with respect to the monthly fixed charge and with respect to the utility's other customers. In this statement, the Commission will first discuss fixed distribution costs and will then explain the avoided cost basis of its proposal.
>
> The costs of providing electric utility service are often assigned to one of three categories: customer related costs, demand related costs, and energy related costs. Customer related costs vary not with usage, but with the number of customers on the system. The costs of meters, meter reading, and billing are usually classified as customer related costs. Demand related costs are costs which vary with the rate at which energy is consumed, and they are important both at the individual customer level, and across the whole system. Electric utility systems must be designed to meet maximum demands of individual customers as well as the maximum demand of the entire system (system peak). Energy related costs vary with the amount of energy consumed. In the short run, energy related costs tend to be variable, while demand and customer related costs are relatively fixed.

Rate schedules for residential cunsumption typically establish a two-part rate: a fixed monthly charge and one or more energy block rates. Under these schedules, a customer's bill is computed by multiplying his consumption by the energy rate and adding the fixed charge.

Often the fixed charge does not cover the full amount of the average fixed costs (demand and customer related) allocated to residential customers. When this is the case, the energy charge is raised from where it otherwise would be, so that the utility can collect its total costs. Sometimes this is done only in the initial block or blocks of consumption. The result is the familiar "declining block" rate structure, in which the charge for consuming an additional kilowatt-hour declines as consumption increases beyond set levels. In other cases, the rates are designed such that the energy charge per kilowatt-hour is constant at all levels of consumption.

In the short run, generation by qualifying facilities enables utilities to avoid energy related variable costs, but not customer related and demand related fixed costs. As has been discussed above, state law and these proposed rules require qualifying facilities to pay any monthly fixed charges which are assessed to similar nongenerating customers.

The Commission has considered "the fixed distribution costs to the utility not otherwise accounted for in the basic monthly charge." The Commission believes that if this were its only requirement it would be reasonable in many cases to assess qualifying facilities an additional fixed charge to recover fixed distribution costs which other customers pay through consumption of energy at elevated energy rates. However, the Commission must also "ensure that the costs charged to the qualifying facility are not also discriminatory in relating to the costs charged to other customers of the utility." If a nongenerating customer reduces his consumption to zero, he must pay only the monthly fixed charges. Consequently, the Commission believes it would be discriminatory to require a qualifying facilities to pay more than the standard monthly fixed charge.

The analysis above does show that if compensation for energy provided by a qualifying facility is to be at the retail energy rate, the lowest priced block in a blocked rate is the appropriate rate to choose. That lowest priced block is most closely related to costs the utility can avoid.

The Commission believes that it is appropriate to set the rate for net deliveries to the utility by this group of qualifying facilities at the retail energy rate. The Commission has reached this belief after consideration of a number of factors.

One of the factors was the level of retail rates relative to avoided cost rates. In most cases, the Commission anticipates retail rates will be higher than rates set at full avoided energy and capacity costs as calculated elsewhere in these rules. This is primarily because utilities cannot avoid all their costs, but their retail rates must collect enough revenues to cover total costs. The discussion above pointed out that utilities do not avoid fixed transmission and distribution costs. Some utilities also have costs like those associated with energy audits under the Minnesota Energy Conservation Service program which are not avoidable but which are recovered through retail rates.

While the Commission anticipates that the retail rate will in most cases be higher than the avoided cost rates calculated elsewhere in these rules, the Commission cannot be certain that the retail rate will be higher than the sum of the actual avoided cost of the utility and the external costs (e.g., acid rain caused by coal fired power plants) to the public. Although the Commission has attempted to balance the interests of qualifying facilities, utilities, ratepayers, and the general public with great care in developing the avoided cost calculation, that calculation is not perfect. One reason for this is that the Commission's calculated avoided cost rates excludes external costs. Since external costs are, by their very nature, unquantifiable, it is not appropriate to explicitly take them into account in the calculation of avoided cost based rates.

Nevertheless, the Commission believes that it is appropriate to take them into account in a judgemental way when setting purchase rates for qualifying facilities with capacity of less than 20 kilowatts. It is possible, therefore, that the retail rate may approximate avoided costs for these smaller facilities.

A related consideration taken into account in developing these proposed rules was the unquantifiable nature of some of the factors the Commission was directed to weigh. Examples of these are the aggregate value of capacity from qualifying facilities on the utility system, and the smaller capacity increments and shorter lead times available with additions of capacity from qualifying facilities. These both serve to increase the value of qualifying facilities, and are particularly applicable to the smaller facilities under discussion here. Yet neither lends itself to quantification in an avoided cost calculation.

A third factor the Commission considered was the advantage in simplicity and customer understandability of using retail rates instead of the avoided cost calculation. The retail rate is a readily available number which the potential owner of a qualifying facility can use to determine the feasibility of an investment without having to work through the complexities of the avoided cost calculation. Thus the use of the retail rate should encourage cogeneration and small power production by these small facilties, which are likely to be less sophisticated than larger facilities.

The Commission's fourth consideration was the effect of this proposal on the development and small power production throughout the state. Each utility has its own cost structure and its own plan for generation expansion. Consequently, there is great variation in the avoided costs of Minnesota utilities. This could lead to encouragement of cogeneration and small power production in some areas, and discouragement in others. Larger facilities may be able to wheel (transmit) power to other utilities, and thereby get around this problem, but small facilities are essentially limited to the utility to which they are interconnected. Use of retail rates should encourage more balanced development, and provide reasonably similar incentives to potential owners of qualifying facilities throughout the state.

Finally, the Commission considered legislative intent. In February of 1981, the Commission published and gave wide distribution to a proposed rule concerning cogeneration and small power production. In that document the Commission proposed to compensate small qualifying facilities for net deliveries at retail rates. That proposal was well known to House and Senate sponsors of H.F. 473, the bill which eventually was enacted as M.S. § 216B.164. The Commission received generally favorable comments on the proposed rule from those legislators. Representative Earl Hauge, chief House author of the bill wrote, "I think your proposed rules are excellent and will implement the intent of H.F. 473 and the PURPA regulations." Senator Gregory Dahl wrote:

I want to emphasize at the outset that I did not author the cogeneration and small power production legislation because I was dissatisfied with the Commission's actions in this area previously. Quite to the contrary. The Commission is to be strongly commended for the admirable job it has done in implementing PURPA 210 and the FERC rules in the face of a myriad of novel and complex issues.

Nearly all legislators supporting enactment of H.F. 473 were strong supporters of the Commission's proposed rule (although some wished higher purchase rates for small power production) and wanted to ensure that the Commission's rule and jurisdiction in this area would apply statewide, rather than merely to investor-owned utilities. Accordingly, in assessing the impact of H.F. 473 as enacted on the Commission's previously proposed cogeneration and small production rule, the Commission should keep in central focus that the Legislature's intent with this legislation was not to displace the Commission's proposed rule, but rather to expand and supplement the Commission's power to act in this area.

Ra
tr
ra
mi
cl

Of
fc
w
t
b
r
k
I
p.

In light of these considerations, the Commission ... ...s that its proposal to compensate qualifying facilities of 20 kilowatts or less for energy delivered to the utility in excess of their consumption at the energy component of the retail rate is both necessary and reasonable.

Finally, it is necessary that the rates for purchase reflect changes to the energy rate due to the operation of the utility's fuel adjustment clause because as the utility's cost of fuel increases, its avoided cost will also increase. This is a convenient and reasonable way to track changes in avoided costs from year to year and month to month.

The Examiner found this section of the proposed rules both necessary and reasonable.

The Commission adopts the findings of the Examiner, and concludes that the need for and reasonableness of this section has been adequately demonstrated by the Statement.

B.3.b.

This section of the proposed rules was explained in the Statement as follows:

> This part of the proposed rule sets payment for excess energy deliveries of net energy billed qualifying facilities larger than 20 kilowatts at full avoided energy and capacity costs, as calculated through application of these rules.
>
> The Commission believes it is necessary and reasonable to distinguish between smaller and larger net energy billed qualifying facilities. Such a distinction results in a more equitable balance between encouragement of cogeneration and small power production and protection of ratepayers.
>
> In its discusssion in the previoius section, the Commission observed that retail rates may approximate avoided costs, particularly when externalities and unquantifiable concepts are taken into account. The Commission nevertheless thinks that its calculation of avoided cost is in most cases a better approximation of real avoided costs. The Commission also thinks the conditions which make the retail rate appropriate for qualifying facilities of 20 kilowatts or less do not apply to larger units.
>
> If rates were set precisely at avoided costs, rates paid by utility customers would always be the same whether the utility purchased from qualifying facilities or generated all of its own electricity. If rates were set below avoided costs, ratepayers would probably be somewhat better off if the utility purchased from qualifying facilities. On the other hand, if rates for purchases from qualifying facilities were set above avoided cost, rates paid by utility customers would be higher with purchases from qualifying facilities. The ideal balance of encouraging cogeneration and small power production consistent with protection of ratepayers is achieved by setting rates equal to avoided costs.
>
> Unfortunately, it is not possible to set rates precisely equal to avoided costs. The best that can be done is to approximate avoided costs. In developing its avoided cost calculation, the Commission has exerted every effort to achieve a reasonable approximation of real avoided costs. Nevertheless, judgments had to be made, and in exercising its judgement the Commission preferred to err on the side of encouraging cogeneration and small power production. To that extent, it is reasonable to expect one result of implementation of these rules to be a tendency to push utility rates slightly higher than they otherwise would be. This result will be tolerable if, as expected, the increase is very small, and cogeneration and small power production lead to expected benefits to the general public.
>
> If the analysis above is correct, and the calculated avoided costs are in fact above the real avoided costs, by however a small margin, then it follows that purchase rates equal to retail rates, which are above calculated avoided costs, are also above real avoided costs, and by a greater margin. Compensating qualifying facilities at the retail rate thus presents a greater risk to the ratepayer than compensating them at calculated avoided costs.

The Commision believes that the increased risk is justified when the qualifying facility use 20 kilowatts or less, but not when it is larger. A 20 kilowatt generator is the largest unit which would reasonably be installed to simply replace utility power with self-generated power for the typical residential or farm customer. Any larger unit would be installed by one of these customers for the purpose of making net sales to the utility.

When the unit is installed simply to offset consumption from the utility, net deliveries to the utility will presumably be both random and small. Under these conditions, the Commission believes the additional risk and possible cost to the ratepayers will be kept under reasonable bounds, and will be justified by the additional encouragement given to cogeneration and small power production.

When the unit is installed to make net sales to the utility, however, the possible cost to the ratepayer increases substantially. Under these conditions, the Commission believes the better balance is struck by paying the larger qualifying facility at the calculated avoided cost rate. The cutoff level of 20 kilowatts is reasonable because that is the largest unit which would reasonably be installed simply to meet the individual needs of a typical residential or farm consumer.

The Examiner found this section of the proposed rules both necessary and reasonable.

The Commission adopts the findings of the Examiner, and concludes that the need for and reasonableness of this section has been adequately demonstrated by the Statement.

C. Simultaneous purchase and sale billing rate.

C.1.

This section describes the rate to be paid a qualifying facility with capacity of 40 kilowatts or less which chooses not to offer electric power for sale on a time-of-day basis. The purpose of this section was explained in the Statement as follows:

The Commission believes it is necessary to allow a qualifying facility to sell all its output to a utility and at the same time purchase all its needs from the utility in order to encourage cogeneration and small power production. If purchase rates, as calculated under this rule and based on avoided costs, are greater than retail rates, this provision will encourage potential qualifying facilities to deliver energy to the system. Without this provision the maximum compensation to the qualifying facility for the initial kilowatt-hours generated would be the retail rate and consequently, because the purchased rates were greater than the retail rate, the qualifying facility would be compensated at a rate below the utility's avoided cost.

All qualifying facilities with capacity of greater than 40 kilowatts are covered in later sections of the proposed rule. Also, any qualifying facility of 40 kilowatts or less may choose to sell power on a time-of-day basis or on a net energy basis. Such a qualifying facility would not be covered under this section. The purpose of this secton of the proposed rule is to simply describe which qualifying facilities are covered under this section.

The Examiner found this section of the proposed rules both necessary and reasonable.

The Commission adopts the findings of the Examiner, and concludes that the need for and reasonableness of this section has been adequately demonstrated by the Statement.

C.2.

This section states:

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.

The Examiner found that this section is required by M.S. § 216B.164 and that it is reasonable.

The Commission adopts the findings of the Examiner, and concludes that the need for and reasonableness of this section has been adequately demonstrated.

C.3.a.
C.3.b.

These subsections require the utility to purchase all energy generated by the qualifying facility and to compensate the qualifying facility for avoided energy and capacity costs. In the Statement, the Commission described these subsections of the rule as initially proposed as follows:

> Qualifying facilities choosing to sell power under the simultaneous purchase and sale billing rate agree to consider their purchases and sales as separate economic transactions. These sections provide that purchases of energy and capacity by the qualifying facility shall be billed according to the utility's applicable retail rate schedule, just as all other customers of the utility are treated. By the same token all purchases of energy by the utility shall be set at appropriate rates, based upon the calculated avoided costs of the utility. It is necessary and reasonable to give qualifying facilities this purchase/sale option. In the event that avoided cost rates are higher than the applicable retail rate this option would compensate the qualifying facility based upon the utility's avoided cost. The qualifying facility would be paid less than avoided cost under this condition if it did not have this option and sold power on the basis of net energy billing. Because M.S. § 216B.164 requires that the purchase rates be based upon avoided cost, it is both necessary and reasonable that this option be provided.
>
> The sum of paragraphs (a) and (b) is the utility's calculated avoided energy and avoided capacity costs per kilowatt-hour averaged over the on-peak and off-peak periods. This section simply directed the utility to sum the avoided energy and avoided capacity costs pertaining to either generating or nongenerating utilities as calculated in an earlier section of the proposed rule to determine the appropriate purchase rate. It was shown earlier in this statement that those amounts are appropriate estimates of the utility's avoided energy and avoided capacity costs. Since the utility avoids both energy related costs and capacity related costs this section is necessary and reasonable if the qualifying facilities are to be compensated at avoided cost, as required by state law.

In the Comments, the Commission described its proposed changes to paragraph (a) as follows:

> The changes are necessary and reasonable to accommodate recommended changes in definitions and filing requirements to reduce administrative burdens and to assure proper payments to qualifying facilities.
>
> In its comments about filing requirements, the Commission is recommending that small generating utilities be given the option of determining their avoided costs and filing Schedules A and B or simply filing their retail rate schedules. Choosing the second option would greatly reduce the time and expense necessary to comply with the rules. qualifying facilities are nevertheless entitled to be paid the full avoided costs of the utility. The Commission must, therefore, exercise reasonable care that payments made by utilities which choose not to calculate their avoided costs not be less than full avoided costs. The Commission believes it is reasonable to assume that in most cases the utility's retail rate will not be less than its avoided costs. The Commission does not believe that any fraction of the retail rate, less than 100%, can be assumed to be universally more representative of full avoided costs. The Commission also observes that setting payments equal to some fraction of the retail rate would increase the complexity of rules already criticized for being too complicated. The Commission recommends, therefore, that payments to qualifying facilities from generating utilities which choose not to calculate their avoided costs be set equal to the retail rates.

The Commission is also recommending changes in the filing requirements with respect to non-generating utilities. It is recommending that the filing of their suppliers' avoided costs shown on Schedules A and B be optional. The paragraph above, 4 MCAR § 3.0456 C.3.a. reasonably says that if Schedules A and B have been filed, the payments for energy shall be the Schedule A avoided costs. If, however, the utility has only filed Schedule G, the reasonable assumption is that the utility can avoid those costs, so the energy rate of Schedule G is made the energy component.

In the Comments, the Commission discussed its proposed changes to paragraph (b) as follows:

> In general, the changes recomended here parallel the changes recommened in paragraph C.3.a. Two comments should be made. First, it should not be assumed that there will be no capacity payment from a generating utility whose retail rate schedule has no demand charge. Where it is uneconomic to install demand meters due to the size and/or the uniformity of the customers' loads, the demand related costs are often recovered through the energy charge. Therefore, in those cases, payment under C.3.a., although classified as the energy component, will actually cover both energy and capacity.
>
> Second, the Commission has attempted to simplify the rule by recommending the substitution of "shown on Schedule B" for "as calculated according to 4 MCAR § 3.0452 C.4. or C.5. as appropriate." This substitution should make the rule easier to read. The same change has been recommended in D.3.b. below.

The Examiner found 4 MCAR § 3.0456 C.3. of the rules as finally proposed defective in part, stating:

> Section 3.0456 C.3. requires that the utility "purchase all energy generated by the qualifying facility" and compensate the qualifying facilities in accordance with the avoided costs of the utility.
>
> Both federal and state law only require that the utility purchase any energy and capacity which is made available from a qualifying facility. There is no legal authority for the Commission to require a QF to sell all energy generated by it to a utility. In fact, such a result would conflict with one of the presumed purposes for establishing a QF, the availability of the power generated by the QF for satisfaction of its own internal energy needs. Hence, the requirement that a Qf sell all energy generated to the utility is beyond the statutory authority of the Commission. For the reason hereinbefore enumerated, the requirement of § 3.0456 C.3. of the proposed rules is also unreasonable.
>
> To correct the defect, the language "generated by the qualifying facility" contained in the first sentence of § 3.0456 C.3. must be deleted and language substantially similar to the following included:
>
> All energy and capacity which is made available to it by the qualifying facility . . .
>
> Such an amendment will not result in a substantial change within the meaning of 9 MCAR § 2.111.

The Commission has added the language recommended by the Examiner, and has also added language to clarify the intent of this rate option that all power generated by a qualifying facility may be treated as being made available to the utility regardless of the qualifying facility's actual consumption.

The Commission adopts the findings of the Examiner, and concludes that the need for and reasonableness of this section has been adequately demonstrated. Further, the Commission finds that these changes do not constitute a substantial change within the meaning of 9 MCAR § 2.111.

With respect to 4 MCAR § 3.0456 C.3.a., the Examiner found this section of the rules as finally proposed necessary and reasonable and found that the changes did not result in substantial change within the meaning of 9 MCAR § 2.111. He stated the following:

> Section 3.0456 C.3.a. describes the energy component of that portion of the rate applicable to the utility's avoided energy costs. Section 3.0456 C.3.a. has been amended to allow a Generating utility which has not filed Schedule A, as authorized by § 3.0452 A., to

substitute the energy rate contained in its retail rate schedule for the avoided cost calculation contained in Schedule A. The new language contained in the final portion of § 3.0456 C.3.a. relative to a Non-generating utility involves the same language relative to calculation of the avoided energy cost as was contained in the rule as initially submitted.

As previously discussed, Minn. Stat. § 216B.164 (1981 Supp.), requires that a QF be compensated for energy supplied by it on the basis of the utility's full avoided cost. Moreover, compensation for the full avoided costs of the utility is not prohibited by federal law. (See, PURPA § 210; 18 C.F.R. § 292.304 (a) (2). Hence, it is reasonable to compensate a QF for the utility's full avoided energy costs. Using for determination of such avoided energy costs the appropriate system average incremental energy costs shown on Schedule A for a Generating utility that has filed such Schedule, the energy rate of the retail rate schedule applicable to the QF for a Generating utility that has exercised its option not to file Schedules A and B, or the energy rate shown on Schedule G for a Non-generating utility most clearly approximates the utility's true avoided energy costs. (See, Statement of Need and Reasonableness, p. 7-8, 15, 29-30 and Agency Ex. J, Reply Comments, pp. 11-12).

Several distribution cooperatives argued that it is inappropriate to use the rate at which a Non-generating utility obtains wholesale power when the Non-generating utility itself owns the generation and transmission utility. (See, e.g., Pub. Ex. 4, Eicher; Pub. Ex. 14, United Power Association, p. 2; and Pub. Ex. 24, Cooperative Power Association, p. 4). Such comments argued that, in that case, the appropriate rate is the avoided cost of the generation and transmission utility not the wholesale rate paid by the distribution utility. It is not reasonable, however, to make the amount of compensation to be received by a QF dependent on the random factor of the organizational nature of the utility to which it is interconnected. The result of such a recognition of business organization in the rate paid the QF could reasonably be an uneven geographic development of QFs in areas containing distribution co-ops. which own the generating and transmission co-op.

The Hearing Examiner finds that Section 3.0456 C.3.a. is reasonable.

The amendments to § 3.0456 C.3.a. do not constitute a substantial change within the meaning of 9 MCAR § 2.111. The language of the subsection dealing with a Non-generating utility in all material respects relative to the calculation of the rate to be paid a QF is identical to the language as additionally proposed. Moreover, for the reasons enumerated in Finding 38, supra, the provision allowing a Generating utility which has not filed Schedule A to substitute the energy rate from its retail rate schedule does not constitute a substantial change which could adversely impact any interested person.

The Examiner found 4 MCAR § 3.0456 C.3.b. of the rules as finally proposed defective in part, stating:

Section 3.0456 C.3.b. describes the capacity component to be included in the simultaneous purchase and sale rate. The Commission attempts herein to allow recovery of a capacity component which fully compensates the QF for the utility's avoided capacity costs. With respect to a QF that provides Firm power, calculation of the utility's avoided capacity cost based on the factors specifically enumerated in § 3.0456 C.3.b. reasonably approximates the avoided capacity cost to the utility. To the extent that § 3.0456 C.3.b. allows a capacity component in the rate paid a QF that does not provide Firm power, however, the calculation contained in this portion of the proposed rules may exceed the avoided capacity costs of the utility. There is no support in the record for the conclusion that, in the absence of the provision of Firm power, a utility experiences any avoided capacity costs. Since true avoided costs of the utility is the maximum determinant of the rate to be received by a QF not subject to net energy billing under the proposed rules and Minn. Stat. § 216B.164, subd. 2 (1981 Supp.), the Commission has not adduced facts on the record establishing either the requisite statutory authority or the reasonableness of reflecting in the rate paid a QF the capacity component authorized in § 3.0456 C.3.b. with respect to a QF not providing Firm power.

To correct the defect, the Commission has several options. It may add language in § 3.0456 C.3.b. limiting the availability of a capacity component under this provision to a QF providing Firm power. Inserting the words "If the qualifying facility provides firm power to the utility," at the beginning of subparagraph b. and the following sentence at the end of subparagraph b. would reasonably accomplish that result:

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 as a consequence of simultaneous purchase and sale rate.

Neither the amendment suggested, nor the new language contained in § 3.0456 C.3.b., legitimately describing the avoided costs of certain Generating utilities and all Non-generating utilities, constitutes a substantial change within the meaning of 9 MCAR § 2.111. (See, Findings 38 and 39, supra).

The Commission adopts the Examiner's findings, and concludes that the need for and reasonableness of this definition has been adequately demonstrated. Also, the Commission finds that the changes made in the rule as finally proposed do not constitute a substantial change within the meaning of 9 MCAR § 2.111.

D. Time-of-Day Purchase Rates.

D.1.

This subsection of the rules states which qualifying facilities are eligible for time-of-day rates. The purpose of this subsection was explained in the Statement as follows:

Purchase or buy back rates based upon the time-of-day of energy deliveries have several advantages over non-time differentiated rates. First, since the utilities' incurred costs vary by the time of day so do the utilities' avoided costs vary by the time of day. In short, a kilowatt-hour delivered to a utility during on-peak hours is more valuable than a kilowatt-hour delivered during off-peak hours because it is more expensive for the utility to generate electricity in the on-peak hours. Consequently, the utility's avoided costs are higher in the on-peak period than in off-peak periods and so to the extent that purchase rates are based upon time-of-day energy deliveries those purchase rates will be more accurate estimates of tne utility's avoided costs.

In addition, purchase rates based upon the time of day of energy deliveries will give qualifying facilities appropriate incentives to deliver as much on-peak energy as is economically possible. Under this pricing scheme, the qualifying facilities will be paid higher rates for on-peak energy deliveries and so they are likely to deliver more energy during on-peak hours than they otherwise would.

The disadvantage of time-of-day purchase rates is the higher metering cost that will be incurred in order to implement this method of pricing. The qualifying facility will have to finance a time-of-day meter. These meters are more expensive than standard watt-hour meters. The cost of these meters is the reason that time-of-day purchase rates are not being implemented on a mandatory basis for qualifying facilities with capacity of less than 40 kilowatts.

It is the Commission's judgement that 40 kilowatts is an appropriate and reasonable cutoff point for the implementation of mandatory time-of-day purchase rates. Clearly, at some point the advantage previously discussed begin to outweigh the disadvantage of slightly higher metering costs. It is likely that the 40 kilowatt level is a conservative estimate of this balancing point and hence is a reasonable level.

An example may illustrate the appropriateness of the chosen cutoff level. Assume the following:

1. The standard purchase rate is 3¢/kwh.
2. The on-peak purchase rate is 4¢/kwh.
3. The off-peak purchase rate is 2¢/kwh.

4. 50% of all hours are on-peak and 50% are off-peak hours.
5. $4.60/month is a reasonable estimate of the monthly carrying cost of one time-of-day meter (this is the fixed monthly charge which Northern States Power Company bills its General Service Time-of-Day customers).

Given these assumptions, a qualifying facility with generating capacity of 40 kilowatts and an average monthly load factor of 80 percent would generate (40 kwh x 720 hours x .8 = 23,040 kwh) 23,040 kilowatt-hours in one month. If we further assume that such a qualifying facility would respond to time-of-day purchase rates by shifting some production of energy from off-peak to on-peak hours the benefit to the qualifying facility can be measured. If, after the switch, the qualifying facility generated energy at 100% of capacity on-peak and at 60% of capacity off-peak, a comparison of the before and after payments is as follows:

Payment under standard rate

23,040 kwh x 3.0¢ = $691.20

Payment under time-of-day rate

on-peak kwh = 40 kw x 360 hours x 1.0 = 14,400
off-peak kwh = 40 kw x 360 hours x .6 = 8,640

on-peak:	14,400 kwh x 4.0¢ =	$576.00
	8,640 kwh x 2.0¢ =	172.80
	23,040	$748.80

payment under time-of-day rate =	$748.80
payment under standard rate =	691.20
difference (per month)	$ 57.60
less: monthly cost of one time-of-day meter	4.60
net gain to qualifying facility	$ 53.00

This example shows that it would be cost effective for a qualifying facility with the operating characteristics shown to sell energy on a time-of-day basis.

For the above reasons the proposed rule would be effective at encouraging cogeneration and small power production and would more accurately compensate QF for the utilities' avoided costs. Consequently, this section of the proposed rule is both necessary and reasonable.

It is necessary and reasonable that the 40 kilowatt limit be applied in a mandatory fashion so that qualifying facilities will be compensated appropriately and given the proper production incentives. This will not place an unreasonable burden on these qualifying facilities. At the same time, it is reasonable that any QF with capacity less than 40 kilowatts that are willing to pay the additional metering costs should be allowed to sell energy on a time-of-day basis.

In addition, it is necessary and reasonable that QF with capacity greater than 100 kilowatts also have the option to sell energy on a time-of-day basis to insure that these qualifying facilities are not treated unfairly in comparison with other qualifying facilities. At the same time, however, it is necessary to make eligibility for this rate conditional upon the delivery of firm power to protect the financial condition of the utility and to protect the utility's ratepayers. The protection of the utility and its ratepayers is a serious concern when considering the rate for purchase applicable to qualifying facilities with capacity greater than 100 kilowatts because these qualifying facilities may not necessarily be generating during the utility's peak load hours whereas a large number of smaller qualifying facilities will on average be generating a consistent proportion of energy during those peak hours. Therefore, due to this potential lack of diversity, the utility may need some guarantee that the qualifying facility with capacity greater than 100 kilowatts will provide firm power during peak hours in order to meet the utility's peak demand.

The Examiner found this section of the rules necessary and reasonable but also found that the phrase "firm electric power" should be replaced by "firm power" in order to eliminate an element of uncertainty and vagueness insomuch as the term "firm power is a defined phrase in these rules, and "firm electric power" is not.

The Commission adopts the findings of the Examiner, and concludes that the need for and reasonableness of this section has been adequately demonstrated by the Statement.

D.2.

This section requires that a qualifying facility be billed for the energy and capacity it consumes on the same basis as other customers of the utility in the same rate class through application of the utility's retail rate schedule. The purpose of this section was explained in the Statement as follows:

> This section of the proposed rule requires that the qualifying facility will not be billed on a net energy basis if it chooses to sell power on a time-of-day basis. Any appropriately sized qualifying facility wishing to sell energy on a net energy basis may do so under 4 MCAR § 3.0456 (8) so it is unnecessary to duplicate that option here. Further, since the qualifying facility should be billed according to the retail rate schedule it will be treated in a nondiscriminatory fashion, compared to the utility's other ratepayers.
>
> If it were not for the high cost of metering, it is safe to assume that most utility rates would be based upon time-of-day, i.e., time-of-day rates would be the standard instead of the exception. This proposed rule provides that if a qualifying facility has time-of-day metering installed and if the utility to which the qualifying facility is connected is rate regulated by this Commission, the utility may petition to require the qualifying facility to buy energy as well as sell energy on a time-of-day basis. This is necessary and reasonable because it will allow the utility to more appropriately price the electric service to the qualifying facility. At the same time, the qualifying facility's interests will be protected by representation before the Commission.
>
> The Examiner found this section of the rule necessary and reasonable.

The Commission adopts the findings of the Examiner, and concludes that the need for and reasonableness of this section has been adequately demonstrated by the Statement.

D.3.

In the rules as finally proposed, this section required that a utility purchase all energy generated by the qualifying facility and compensate the qualifying facility for the utility's avoided energy and capacity costs as described in (e) and (b). The Examiner found the following:

> For the reasons stated in Finding 91, supra, the requirement in § 3.0456 D.3. that the utility purchase all energy generated by the Qualifying Facility exceeds the statutory authority of the Commission and hence, is neither necessary nor reasonable.
>
> To correct the defect, the Commission must amend § 3.0456 D.3. by striking "generated by" and inserting in lieu thereof "made available to it" in the first sentence of this subsection.
>
> The amendment suggested, since it is mandated by Minn. Stat. § 216B.164, subd. 4 (1981 Supp.), does not constitute a substantial change within the meaning of 9 MCAR § 2.111.

The Commission has made the change recommended by the Examiner, adopts the findings of the Examiner, and concludes that the need for and reasonableness of this section has been adequately demonstrated.

D.3.a.
D.3.b.

In the Statement, these paragraphs of the rule as initially proposed were justified as follows:

This section of the proposed rule is identical to Section C.3. and it is necessary and reasonable for the same reasons stated in the applicable Section of this statement.

The rules as finally proposed, contained several changes to these paragraphs, as described in the Comments:

> In general, the Commission's comments with respect to C.3.a. and C.3.b. apply to the two paragraphs shown above. D.3.b. is also shown changed to include division of Schedule G rates by the number of on-peak hours. "On-peak" was inadvertently omitted from the proposed rule, although the Statement of Need and Reasonableness addressed this. The Commission is also recommending the addition of the last sentence shown to avoid any ambiguity. Comments during the hearings indicated that not everyone understood that capacity payments under time-of-day rates would be made only for on-peak deliveries.
>
> With respect to paragraph a, the Examiner found the following:
>
> The calculation of the avoided energy costs of the utility for purposes of the time-of-day rate, as stated in § 3.0456 D.3.a. of the proposed rules is a realistic approximation of the utility's avoided energy costs. As such, it is reasonable.
>
> For the reasons stated in Findings 38 and 39, supra, the amendments to § 3.0456 D.3.a. do not constitute substantial changes within the meaning of 9 MCAR § 2.111.
>
> With respect to paragraph b, the Examiner found the following:
>
> Section 3.0456 D.3.b. is a description of the avoided capacity cost to be paid a QF selling energy on a time-of-day basis. For the reasons stated in Finding 93, supra, and the accompanying Discussion, § 3.0456 D.3.b., as applied to a QF providing Firm power is reasonable. With respect to a QF not providing Firm power to the utility, for the reasons stated in the Discussion following Finding 93, supra, the Commission has not demonstrated that the payment of a full avoided capacity component to a QF not providing Firm power is reasonable by an affirmative presentation of facts.
>
> To correct the defect, the Commission may make the availability of an avoided capacity component contingent upon the provision of Firm power by the QF. Such a result could reasonably be accomplished by inserting in this provision an amendment similar to that suggested with respect to § 3.0456 C.3.b. of the proposed rules in Finding 93, supra.
>
> For the reasons stated in Findings 38 and 39, supra, the amendment to § 3.0456 D.3.b. does not constitute a substantial change within the meaning of 9 MCAR § 2.111.

The Commission has made the changes recommended by the Examiner, adopts the findings of the Examiner, and concludes that the need for and reasonableness of these sections has been adequately demonstrated.

4 MCAR § 3.0457. Negotiated rate for purchases.

A. Contracts negotiated by customer.

This section states that a qualifying facility with capacity greater than 100 kilowatts may negotiate by contract with its interconnected utility for the payment of avoided capacity and energy costs. In the Statement, the Commission explained the purpose of this section as follows:

> Under the FERC regulations (18 CFR § 292.304 (c)), utilities must offer to purchase from QF of 100 kilowatts or less on the basis of standard rates. There are several advantages to using established standard rates. Among the advantages are the assurance of non-discriminatory treatment, the ability to plan construction and interconnection of a qualifying facility more easily because rates, terms, and conditions already exist, and a reduced administrative burden on both the qualifying facility and the utility. These advantages make standard rates particularly appealing for smaller QF.

There are nevertheless disadvantages to standard rates. When all are treated alike, individual differences are not taken into account. One qualifying facility may employ a unique technology or operating practice which is particularly suited to helping its interconnected utility to avoid costs. If the qualifying facility is interconnected under standard rates, it may lose payment for some of those avoided costs. Worse, the standard rates may operate to deter development of such technologies or practices.

The inability to account for special circumstances becomes a greater disadvantage as the capacity of the qualifying facility increases. Also, because more resources are invested in the qualifying facility and its effects on the utility are greater, it becomes more cost effective to devote administrative efforts towards addressing challenges and opportunities involved as the capacity of the qualifying facility increases.

The FERC recognized these phenomena in requiring standard rates for QF of 100 kilowatts and under, and making them an option above that capacity. The Commission also believes that recognition is necessary and reasonable.

The Examiner concluded that this section of the rule is necessary and reasonable but added the following statement:

> While the Hearing Examiner has concluded that § 3.0457 A. is reasonable as drafted, several witnesses testified that the language of § 3.0457 A. contradicts the earlier provision of the rules requiring each QF to negotiate an interconnection contract with the utility. (See, Pub. Ex. 10, Minnesota Power, p. 8; Pub. Ex. 65, Ottertail Power Company, p. 16). For purposes of clarity and to avoid a conflict with an earlier provision of the rules, the Commission may wish to redraft § 3.0457 A. in substantially the following language:
>
> Except as provided in D., a Qualifying Facility with capacity greater than 100 kilowatts shall provide by contract with the utility the applicable rates for payment to the qualifying facility for avoided capacity and energy costs.

The Commission has made the changes recommended by the Examiner, adopts the findings of the Examiner, and concludes that the need for and reasonableness of this section has been adequately demonstrated.

B. Amount of capacity payments; considerations.

This section of the rules states that the qualifying facility of a capacity greater than 100 kilowatts shall be compensated for capacity cost savings of the utility through consideration of nine enumerated factors. In the Statement, the Commission explained the purpose of this section as follows:

> A number of factors may offset the costs avoided by the utility as a result of the qualifying facility's energy output. It is necessary and reasonable that each of these factors is listed in the proposed rule to insure that these relevant factors are considered by the parties in their negotiation. Each of the factors affects either the amount of capacity, in kilowatts, which the qualifying facility causes the utility to avoid or they affect the cost, per kilowatt, of the capacity avoided due to the delivery of power by the qualifying facility. The capacity factor of the qualifying facility, the length of the contract term, the scheduling of maintenance, the willingness and ability of the qualifying facility to provide firm power or capacity during system emergencies or system peaks and its willingness to allow the utility to dispatch its generated energy are all factors which, together with the rates capacity of the qualifying facility, may determine the amount of capacity, measured in kilowatts, which the qualifying facility is causing the utility to avoid. Obviously, the cost of the utility's avoidable capacity is the cost, per kilowatt, of the capacity avoided due to the delivery of power by the qualifying facility. Any actions for noncompliance with contract terms and the smaller capacity increments and the shorter lead times available when capacity is added from QF are factors which may affect, in a general sense, the costs which a qualifying facility causes the utility to avoid.

In the Comments, the Commission explained one minor change to the rules as follows:

> The Commission recommends the addition of the word "capacity" simply to make it clear that the utility is supposed to consider the nine factors listed in the rule to determine the amount of capacity payments. The Commission expects qualifying facilities that are selling power under negotiated rates will receive energy rates equal to the full avoided energy costs of the utility as provided in 4 MCAR § 3.0457C.

The Examiner found this section of the rule reasonable, but added the following statement:

> While the Hearing Examiner has found § 3.0457 B. to be reasonable as drafted, several representatives of larger QFs suggested that the absence in § 3.0457 B. of a statement that the Qualifying Facility is entitled to the utility's full avoided capacity costs as determined through the contractual negotiation allows a utility to legitimately bargain for a capacity payment of less than its avoided capacity costs. A review of the Statement of Need and Reasonableness suggests that such was not the intent of the Commission. Moreover, that result would be prohibited by the requirements of Minn. Stat. § 2168.164, subd. 4(b) (1981 Supp.). To clarify any ambiguity in the final rules, however, the Commission may consider adding to § 3.0457 B., after the heading of the section, language substantially similar to the following:
>
> "The qualifying facility shall be entitled to the full avoided capacity costs of the utility."
>
> Both the amendment suggested by the Hearing Examiner and the addition of the word "capacity" as qualifying the word "payments" in § 3.0457 B. do not constitute substantial changes within the meaning of 9 MCAR § 2.111. That the section relates to capacity payments was implicit in the rule as initially drafted. The word was merely added to avoid any ambiguity. The change suggested by the Hearing Examiner was likewise explicit in the language as initially drafted and is merely declaratory of existing law.

The Commission has made the change recommended by the Examiner, adopts the findings of the Examiner, and concludes that the need for and reasonableness of this section has been adequately demonstrated.

C. Full avoided energy costs.

This section requires that the qualifying facility be paid the full avoided energy costs of the utility adjusted as appropriate to reflect line losses. In the Statement, the Commission described the purpose of this section of the rule as follows:

> The energy output from the qualifying facility with capacity greater than 100 kilowatts will cause the utility to avoid incremental energy costs in the same way that the output from smaller qualifying facilities cause the utility to avoid energy costs. Consequently, in order to base purchase rates on avoided cost it is necessary and reasonable to insure that qualifying facilities are compensated for the full avoided energy costs adjusted for line losses as described earlier in this statement.

The Examiner found this section of the rules both necessary and reasonable.

The Commission adopts the findings of the Examiner, and concludes that the need for and reasonableness of this section has been adequately demonstrated by the Statement.

D. Qualifying facilities of greater than 100 kilowatts.

This section allows a qualifying facility with a capacity of greater than 100 kilowatts to be interconnected to a utility at the utility's standard rates. This section must be read in conjunction with 4 MCAR § 3.0456 D.1., which conditions the availability of the standard rate to a qualifying facility with a capacity in excess of 100 kilowatts when it provides firm power on a time-of-day basis. In the Statement, the Commission described the purpose of this section of the rule as follows:

Upon mutual agreement of the qualifying facility and a utility, a utility may simply connect the qualifying facility according to the standard rates applicable to all other customers. However, since these qualifying facilities have capacity of greater than 40 kilowatts (in fact greater than 100 kilowatts) the only standard rate to which these qualifying facilities would be eligible is the time-of-day rate tariff. This provision is necessary and reasonable since it simply allows one possible outcome of the negotiation process (the connection of the qualifying facility at standard rates) to occur.

The Examiner found this section of the rules reasonable.

The Commission adopts the findings of the Examiner, and concludes that the need for and reasonableness of this section has been adequately demonstrated by the Statement.

4 MCAR § 3.0458 Utility treatment of costs.

The Statement said:

This rule is needed to insure that utility purchases of electricity from qualifying facilities are properly accounted for. It is reasonable in that it flows these costs through to ratepayers in the same manner that costs of purchases from other energy suppliers (i.e., other utilities) are flowed through via Minn. Reg. PSC 392.

The Examiner found that this rule was necessary and reasonable on the record:

108. Section 3.0458 requires that all purchases from a QF with capacity of 100 kilowatts or less and purchase of energy from Qualifying Facilities with a capacity of over 100 kilowatts be considered an energy cost in calculating the utility's fuel adjustment clause. This provision is necessary to ensure that utility purchases of electricty from QF are properly accounted for. The rule is reasonable in that it flows these costs through to ratepayers in the same manner that costs of purchases from other energy suppliers are flowed through to the ratepayers as a result of Minn. Reg. PSC 392.

The Hearing Examiner finds that § 3.0458 is both necessary and reasonable.

The Commission adopts the Examiner's findings and concludes that the need for and reasonableness of this rule have been adequately demonstrated by the Statement.

4 MCAR § 3.0459 Wheeling and exchange agreements.

The Commission's Statement included the following discussion of the need for and reasonableness of this rule:

Wheeling is simply the transmission of electric power from one utility to another. M.S. § 216B.164, subd. 4(c), requires the utility to wheel a qualifying facility's output to another utility if the qualifying facility requests such wheeling, provided that the qualifying facility is at least 30 kilowatts and provided that the wheeling is practicable.

This rule is needed to encourage cogeneration and small power production throughout the state. Because electric utilities have exclusive franchises to serve in particular areas, most potential cogenerators and small power producers can interconnect with just one utility. Different utilities, though, have different cost structures and different load growth expectations. In theory, a utility with no plans to build or purchase capacity for at least 10 years has no avoidable capacity costs. Because utilities are required to pay only their full avoided costs, payments to qualifying facilities from this utility would be correspondingly less than payments from a utility with a great deal of generation expansion planned, and hence large avoidable capacity costs. The wheeling provision enables the qualifying facility to sell to whatever utility is offering the best price, no matter where the utility is located in Minnesota, as long as wheeling is practicable. Looked at from another angle, the

wheeling provision encourages power produced from cogenerators and small power producers throughout the state to flow to those utilities with the greatest need for it. This provision is needed to provide the greatest substitution of power produced from cogenerators and small power producers for power produced from utility central generating stations.

The rule contains three sections concerning payments for wheeling transactions. The Statement's discussion of those sections was as follows:

> These sections provide a reasonable means of accomplishing the wheeling provision. The utility to which the power is wheeled pays exactly its full avoided costs. The payment is made to the utility to which the qualifying facility is interconnected. That utility pays the wheeling charges which have been incurred. It subtracts these payments and its own wheeling costs from the amount it was paid by the receiving utility. The difference is the payment to the qualifying facility. Line losses and transformation losses are automatically accounted for, since the receiving utility pays only for power delivered. The qualifying facility pays for the wheeling, as contemplated in both Minnesota law and the FERC regulations. Finally, the qualifying facility is not burdened with the necessity to deal directly with more than its own local utility.

The Examiner found that the rule was necessary and reasonable on the record:

> Section 3.0459 requires that for Qualifying Facilities with a capacity of at least 30 kilowatts, the utility, at the option of the QF shall wheel the output of the QF to any other Minnesota utility that would experience avoided capacity costs as a result of receiving the wheeled power. The procedure for compensating the QF for its power wheeled requires the utility to initially pay the wheeling charges from the recipient utility and transmit to the QF, upon timely payment by the recipient utility of its full avoided and capacity costs to the wheeling utility, the payment it has received for the wheeled power less its own reasonable costs and the charge imposed by the recipient utility.
>
> Section 3.0459, insofar as it requires the availability of wheeling for a QF with a capacity of 30 kilowatts or greater, is a restatement of Minn. Stat. § 216B.164, subd. 4(c) (1981 Supp.). It is therefore both necessary and reasonable. Minn. Stat. § 216B.164, subd. 4(c) (1981 Supp.), also requires the Commission to establish the methods and procedure for the reimbursement to the QF for the power wheeled. It is reasonable to require the QF to bear the charges associated with wheeling, both because Minn. Stat. § 216B.164, subd. 4 (1981 Supp.), requires that result and because a different allocation of costs would require the utility to bear expenses in excess of the full avoided costs of the recipient utility. It is the purpose of PURPA, the FERC Rules, and Minn. Stat. § 216B.164, subd. 4 (1981 Supp.), that the expense occasioned to a utility as a result of interconnection not exceed true avoided costs of the utility ultimately using the power. The governing law balances the interests of the utility's ratepayers and the cogenerators and small power producers in favor of compensation for full avoided costs. Under such a balance, the ratepayer pays no more for power than would be paid for that delivered from conventional sources.
>
> Hence, § 3.0459 is both necessary and reasonable.
>
> Ottertail Power Company argues that wheeling should be limited to energy in excess of 1,000 kilowatts. It asserts that it is currently impractical to wheel power of less than 1,000 kw. Moreover, it suggests that any QF that can deliver more than 1,000 kilowatts of power does not need the intermediary of a utility in its dealings for wheeling of power. (See, Pub. Ex. 65, Ottertail Power Company, p. 17). The Hearing Examiner finds that a limitation on the availability of wheeling to increments of 1,000 kilowatts would serve no useful purpose. If Ottertail Power Company is correct that it is impractical to wheel power in increments less than 1,000 kilowatts, under § 3.0459, as proposed, the utility could legitimately refuse wheeling. Both Minn. Stat. § 216B.164, subd. 4(c) (1981 Supp.), and § 3.0459 condition the availability of wheeling upon the existence of practicable wheeling conditions. The suggestion by Ottertail Power Company, therefore, adds nothing to the proposed rule and may introduce a totally undesirable element of rigidity.

Actaeon Corporation suggests that the use of the subjective phrase "whenever practicable" is unreasonable in that it could be used to deny wheeling and impede the development of QFs. The phrase, however, is taken directly from Minn. Stat. § 216B.164, subd. 4(c) (1981 Supp.). As such, it is presumptively necessary and reasonable. Further, it would be decidedly impractical to specify fully all conditions under which wheeling should not be available. Since, pursuant to § 3.060 of the proposed rules, all parties have available to them the Commission to resolve disputes, the use of § 3.0459 as an element of oppression by a utility is not a likely occurrence.

Froedtert Malt Corporation suggests that the recipient utilities not be limited to a Minnesota utility. (Pub. Ex. 13, Froedtert Malt Corporation, p. 1). The limitation of required wheeling to another Minnesota utility, however, is expressly stated in Minn. Stat. § 216B.64, subd. 4(c) (1981 Supp.). Additionally, since the calculation of avoided capacity and energy costs contained in the proposed rules, of necessity, only applies to a Minnesota utility that is subject to the jurisdiction of the Commission, extending recipient utilities under § 3.0459 to other than Minnesota utilities would serve no useful function.

The Commission adopts the Examiner's findings and concludes that the need for and reasonableness of this rule have been adequately demonstrated.

4 MCAR § 3.0460. Disputes.

4 MCAR § 3.0460 provides for the Commission to be available to resolve either a dispute or an impasse in the contractual negotiations between a qualifying facility and a utility. It also provides that the burden of proof in such proceedings is on the utility.

In the Statement, the Commission discussed the rule as initially proposed in the following manner:

> The Commission has jurisdiction to resolve disputes between utilities and their customers under M.S. §.216B.17, and has promulgated Minn. Reg. PSC 507 and 508 to establish procedures for handling informal and formal customer complaints. This section of the proposed rules is needed to clearly indicate the Commission's ability and intent to resolve disputes over rule-related issues.
>
> In addition, M.S. § 216B.164, subd. 5, contains essentially the same language as this section of the proposed rules. It is reasonable for the Commission to adopt the same scope of jurisdiction and burden of proof as are required by the enabling legislation.

The Hearing Examiner found the rule to be in response to a statutory requirement and thus both necessary and reasonable. Although the Hearing Examiner found the rule to be necessary and reasonable, he suggested the deletion of the word "electric" as modifying the word "utility" to conform to the defined terms and to be consistent with the usage in other provisions of the rules.

The Commission has followed the Hearing Examiner's suggestion and deleted the word "electric."

The Commission adopts the findings of the Examiner and concludes that the need for and reasonableness of this section has been adequately demonstrated. The Commission further concludes that the change to this section does not constitute a substantial change within the meaning of 9 MCAR § 2.111.

4 MCAR § 3.0461. Notification to customers.

A. Contents of written notice.

4 MCAR § 3.0461 A requires that the utility furnish to its customers notice regarding the following aspects of the Commission's cogeneration and small power production rules: that the utility must provide the information specified in B of this section to all interested parties free of charge upon request, and that any disputes arising as a result of application of the Commission's cogeneration and small power production rules are subject to resolution by the Commission.

In the Statement, the Commission discussed this portion of the rule as follows:

> This rule imposes a duty upon the appropriate utilities to provide notice to their respective customers of:
>
> 1) the utility's obligation to interconnect with and purchase electricity from cogenerators and small power producers;
>
> 2) the utility's obligation to provide customer information concerning cogeneration and small power production to all interested persons free of charge upon request; and
>
> 3) that any disputes concerning interconnection, sales and purchase are subject to resolution by the Commission upon compliance.
>
> This notification requirement is intended to annually inform the utility's customers of the existence of rules concerning cogeneration and small power production in addition to identifying some of the very basic provisions of the rules (i.e., utility's obligation to interconnect with and purchase from a qualifying facility).
>
> Another important aspect of this rule is the notification portion with respect to the availability of free customer information upon request. It is the Commission's position that to effectively encourage cogeneration and small power production, the public must know that there is conveniently accessible information available for their examination and review. Such information is to be available without charge to encourage the unrestricted dissemination and the continuous flow of information to the public.
>
> The required notice is also designed to insure that the public is aware that there is a governmental agency with the capacity to resolve disputes that may be utilized upon proper complaint procedures.
>
> All notices are to be approved in form and content by the Commission to insure clarity and understandability.

In reviewing 4 MCAR § 3.0461 A, the Hearing Examiner stated the following:

> The purpose of the Commission's proposed rules and of Minn. Stat. § 216B.164 (1981 Supp.), is to encourage cogeneration and small power production. That end can only be achieved if potentially interested parties are aware of the existence and minimal requirements of such rules. Including in the material provided to a utility's customers a minimal notice designed to acquaint such customers with the basics of the Commission's cogeneration and small power production rules is the least expensive, most reasonable method of accomplishing that objective. The only comment received relating to § 3.0461 A. of the proposed rules favored the provision. (See, Pub. Ex. 4, Eicher, p. 15).

The Commission finds that 4 MCAR § 3.0461 A is both necessary and reasonable based upon the Statement.

B. Availability of information.

4 MCAR § 3.0461 B requires that the utility publish and make available to all interested persons upon request, free of charge, certain information from which the cost effectiveness of the establishnent and interconnection of a qualifying facility could be determined by a potentially interested party.

The Commission discussed this provision in the Statement in the following manner:

> In addition to the notice requirement, this rule also imposes an obligation on the utility to publish and make available customer information without charge. The Commission recognizes that there is a need to have customer information available for interested persons to inspect.

At a minimum, such customer information must include:

1. A statement of rates, terms and conditions of interconnection;

This information is necessary to provide accurate information from which a prospective cogenerator or small power producer may make an informed and prudent decision. Such information will allow an individual to determine the approximate cost of interconnection as well as the attending obligations and implications thereof.

2. A statement of technical requirements;

Such information is needed to allow a prospective cogenerator or small power producer to determine the appropriate technical specifications to be complied with as well as to select and install the equipment necessary for safe and proper interconnection.

3. A sample contract containing the applicable terms and conditions;

A sample of the contract is needed to allow the prospective cogenerator or small power producer to review, understand and become familiar with the obligations, duties, rights and responsibilities that may be involved by the execution of such a contract.

It is only reasonable and prudent that an individual contemplating the execution of a document be furnished with the document to become familiar with it in order to fully comprehend the implications and obligations thereof.

4. Pertinent Rate Schedules;

This information is intended to provide an accurate foundation for a cogenerator or small power producer to calculate the approximate value of actual or projected output. Such information may be invaluable to an individual contemplating interconnection as it will allow him to evaluate the economic feasibility of such a venture.

5. The title, address and telephone number of the department of the utility to which inquiries should be directed;

This provision is intended to provide a means by which a utility may be contacted to answer questions or to supply additional information. It is an attempt to enhance the flow of information and stimulate communication between potential qualifying facilities and the utilities.

6. This statement: "The Minnesota Public Utilities Commission is available to resolve disputes upon written request," and the address and telephone numbers of the Commission.

This provision is intended and is needed to provide information to any interested person concerning the availability of the Commission to assist in the resolution of any disputes that may arise in addition to providing the public with an address and telephone number by which the Commission may be contacted.

The Hearing Examiner, in his review of 4 MCAR § 3.0461 B, found that the purpose of both the Commission's proposed rules and M. S. § 216B.164 is to encourage cogeneration and small power production to the maximum extent consistent with the interests of the utility's ratepayers. He concluded that since the information required by this provision would be readily available to the utility and its dissemination upon request would not pose an economic burden on the utility, 4 MCAR § 3.0461 B is both necessary and reasonable.

While the Hearing Examiner found 4 MCAR § 3.0461 B was both reasonable and necessary as drafted, he suggested that to avoid ambiguity in the application of subsection B and to be consistent with the hearing examiner's interpretation of subsection B, the word "customer" as it modifies the word "information" should be deleted where the phrase appears in 4 MCAR § 3.0461 A. 2. and in 4 MCAR § 3.0461 B. The Commission agrees with the Hearing Examiner that the word "customer" in the identified context adds nothing to the proper interpretation of the rule and, in fact, may introduce an unnecessary element of confusion. Therefore, in accordance with the Hearing Examiner's recommendation, the Commission has amended the rule as initially proposed by deleting the word "customer" in the pertinent locations.

The Commission adopts the findings of the Hearing Examiner and concludes that the need for and reasonableness of this section has been adequately demonstrated. The Commission further concludes that the amendments to the section do not constitute a substantial change within the meaning of 9 MCAR § 2.111.

4 MCAR § 3.0462 Interconnection guidelines.

The Commission's Statement discussed this rule generally as follows:

The Commission believes a rule covering interconnection guidelines is necessary to achieve two broad objectives. The first of these is to insure the reliability and safety of electric utility service; the second is to encourage cogeneration and small power production.

Electric utilities must furnish continuous reliable service to their customers - service at a fixed frequency with voltages maintained within prescribed limits. Further, their systems must be constructed and operated to be safe for their employees and the general public. Different systems may vary considerably in the physical plant and electrical characteristics employed to deliver electric service safely.

Like utility systems themselves, the generating units used by qualifying facilities may be of many different types. They will probably come in a broad range of capacities and may exhibit markedly different operating characteristics. Their effect on any particular distribution system may vary with both their location on the system and the concentration of qualifying facilities on the system.

There is a potential for problems to develop on the utility system when a utility engages in interconnected operations with a qualifying facility. Whether such problems actually occur depends on the specific electrical characteristics and capacity of the qualifying facility, its location and the concentration of such units on the utility system, the characteristics of the distribution system, and the interaction of these factors with each other. In general, interconnected operations will be successful to the extent these potential problems are anticipated and resolved.

Each of the interconnection guidelines in this proposed rule is designed to prevent one or more of the following potential problems:

1. Safety hazards resulting from a qualifying facility energizing a portion of a distribution system which has been deenergized because of an outage or to enable utility personnel to perform maintenance.

2. Improper operation of equipment installed to protect and regulate the distribution system because qualifying facilities have changed the nature of power flows on the system.

3. Damage to or improper operation of customer-owned equipment due to irregularities in frequency or voltage, or both, or due to excessive harmonics, resulting from interconnected operations with qualifying facilities.

4. Interference with communications circuits caused by excessive levels of harmonic frequencies which may be produced by some qualifying facilities.

These problems point out the need for interconnection guidelines to insure safe and reliable electric service. The Commission believes the proposed rule on interconnection guidelines is also necessary to encourage cogeneration and small power production.

The Commission notes that uncertainty concerning required interconnection equipment may deter potential qualifying facilities. If interconnection guidelines are established by rule, a great deal of uncertainty is eliminated or reduced. In turn, planning becomes simpler and feasibility calculations more accurate. Further, reasonable guidelines established by rule prevent utilities from making unreasonable demands on qualifying facilities. Utilities which did not want to encourage cogeneration and small power production might make such demands in the absence of a rule.

A. Denial of interconnection application.

This section as adopted has been revised from the rule as initially proposed to incorporate the Hearing Examiner's suggestions. The Statement contained the following discussion of the need for and reasonableness of the section as initially proposed:

> This section is necessary in that it provides the utility with advance notice prior to interconnection. The utility and the qualifying facility may then together work out any potential problems before electricity flows and damage is done. It reasonably prohibits the utility from denying interconnection for reasons other than noncompliance with applicable laws or regulations.

The Examiner found that the section was necessary and reasonable as proposed, but suggested some clarifying language:

> Section 3.0462 A. provides that a utility may refuse to interconnect with a QF only until the QF has applied for interconnection pursuant to § 3.0454 K. and the application is approved by the utility. The utility may withhold approval of the application only for failure to comply with applicable utility or governmental laws. Finally, the utility is authorized to include in its contract reasonable technical connections and operating specifications for the QF.
>
> As a consequence of both Federal and State law, a utility is required to interconnect with a QF that offers to sell it power. The interconnection of a QF may, however, result in service problems to both the utility and its customers as a result of interconnected operations. Whether such problems develop, depends upon the degree to which the QF and the utility, through their joint planning efforts, are able to resolve potentials for disruption of the utility's service. It is, therefore, both necessary and reasonable that interconnection not occur until the utility has approved an application for interconnection made pursuant to § 3.0454 K. of the proposed rules. Moreover, the QF is reasonably protected by specifying the conditions on the ability of the utility to deny the interconnection application. A denial of the application is reasonably conditioned only on the failure of the QF to comply with applicable rules or laws.
>
> The Hearing Examiner finds that § 3.0462 A. is both necessary and reasonable.
>
> Several witnesses commented that the failure to include in § 3.0462 A. an affirmative statement regarding the duty of the utility to interconnect with a QF introduces an element of uncertainty into the relationship between a utility and a QF. The Hearing Examiner finds that both the requirements of existing Federal and State law and the language of § 3.0462 of the proposed rules does require an interconnection except as otherwise specifically provided in § 3.0462 A. To avoid any uncertainty, however, the Commission may wish to insert in § 3.0462 A., after the title of subsection A., language substantially similar to the following:
>
> Except as hereinafter expressly provided, a utility shall interconnect to a qualifying facility that offers to make available to the utility energy or capacity.
>
> Jacobs Wind Electric Company asserts that the proposed rule is unreasonable in that it allows a utility rule to serve as a basis for denying interconnection. (Pub. Ex. 16, Jacobs Wind Electric Co., p. 14). Apparently, Jacobs Wind Electric Company posits the use of a utility rule as a means potentially employable by a utility in preventing interconnection. The Hearing Examiner finds that the proposed rules contain adequate safeguards to prevent such a result.
>
> Although the Hearing Examiner finds that the rule is both reasonable and necessary as proposed, in order to remove ambiguity, and for purposes of clarity, the Commission may wish to insert in § 3.0462 A. after the word "utility" and before the word "or" language substantially similar to the following: "rules not prohibited by 9 MCAR §§ 3.0450 - 3.0463".

The Commission has added the clarifying language suggested by the Examiner. The Commission adopts the Examiner's findings, and concludes that the need for and reasonableness of this section has been adequately demonstrated.

B. Notification of telephone utility and cable television firm.

The Statement discussed this section as follows:

> This section makes the electric utility responsible for notifying communications companies of an impending interconnection with a qualifying facility. The notification is necessary to prevent potential communications problems due to possible increases in harmonics in the utility lines. There are two reasons for the utility, rather than the qualifying facility, to take this responsibility. First, it is reasonable to minimize the administrative burden on the qualifying facility in order to encourage cogeneration and small power production. Second, the utility has had to cooperate with telephone and cable firms in the historical development of its system. This implies that coordination has already been established among the appropriate personnel. It is more efficient to make use of this established coordination than to require each qualifying facility to try to find the right people to talk to.

The Examiner found that this section was both needed and reasonable:

> Section 3.0462 B. requires that the utility, as early as practicable, notify affected telephone and cable television companies of a prospective interconnection.
>
> Since the interconnection of a QF may result in increases in harmonics on the utility lines and resulting disruption to the service of both telephone and cable television firms, it is necessary that such firms be notified of the interconnection of a QF prior to its actual in-service date. It is reasonable that the burden be placed on the utility rather than on the QF since administrative burdens will be reduced and the utility has developed coordination with such firms previously in the normal conduct of the utility's business.
>
> The Hearing Examiner finds that § 3.0462 B. is both necessary and reasonable.

The Commission adopts the Examiner's findings, and concludes that the need and reasonableness of this section have been adequately demonstrated by the Statement.

C. Separate distribution transformer; when required.

The Commission has revised the rule as initially proposed in this section to respond to the Examiner's findings and recommendations. The Statement discussed this section as initially proposed as follows:

> This section is necessary for two reasons. First, some installations using inverters may require a transformer to provide proper grounding for safety. Second, a separate distribution transformer may be necessary to prevent service problems such as excessive light flicker or equipment operating problems caused by voltage variations experienced by nearby utility customers. These problems may be caused by the starting, stopping, or irregular operations of a generating unit feeding into a common distribution transformer. A separate distribution transformer for the qualifying facility should largely mitigate these voltage variations. The section reasonably limits the ordinary requirement of this equipment to those units of size and operating characteristics where such problems might be expected to arise.

The Examiner found that the first sentence of this section was necessary and reasonable:

> Section 3.0462 C. allows a utility to require that a QF have a separate distribution transformer if necessary "either to protect the safety of employees or the public or to keep service to other customers within prescribed limits". It also provides that such a

requirement will not ordinarily be necessary for an induction-type generator with a capacity of five kilowatts or less, or for other units with a capacity of ten kilowatts or less that utilize line-commutated inverters.

The Commission suggests that the rule is necessary for two reasons. First, some installations using inverters may require a separate transformer to provide proper grounding for safety. Second, a separate distribution transformer may be necessary to prevent service problems such as excessive light flicker or equipment operating problems caused by voltage variations experienced by nearby utility customers. (See, Statement of Need and Reasonableness, pp. 38, 39). Since such service problems may be caused by a generating unit feeding into a common distribution transformer, it is reasonable, if such problems are likely to occur, to require a separate distribution transformer for the QF. A separate distribution transformer to the QF could mitigate the voltage variations caused by the use of a common distribution transformer. The first sentence of § 3.0462 C. is, therefore, both necessary and reasonable.

He found that the second sentence served no regulatory purpose and should be deleted:

The Commission has attempted to detail the types of QFs that "ordinarily" shouldn't require a separate distribution transformer. The Commission states:

"The section reasonably limits the ordinary requirements of its equipment to those units of size and operating characteristics where such problems might be expected to arise."

(Statement of Need and Reasonableness, p. 39).

Minn. Stat. § 15.0411, subd. 3 (1980), however, requires that a rule have some regulatory effect. The requirement of a separate distribution transformer for a QF can only be imposed if it is necessary either to protect the safety of employees or the public or to keep service to other customers within prescribed limits. There is no "ordinary" application of the requirement. The condition for its application must be demonstrated by the utility irrespective of the size or operating characteristics of the QF. Hence, the nortatory statement in the second sentence of § 3.0462 C. is unreasonable in that it serves no regulatory purpose not adequately expressed in the first sentence of that subdivision.

To correct the defect, the Commission should delete the last sentence of § 3.0462 C. Since the last sentence of § 3.0462 C. is mere surplusage serving no legitimate regulatory purpose, its deletion would not result in a substantial change within the meaning of 9 MCAR § 2.111.

The Commission adopts the Examiner's findings. It has deleted the offending sentence. The Commission concludes that the need for and reasonableness of this section as adopted has been adequately demonstrated, and that the deletion of the second sentence of the section as proposed does not constitute a substantial change within the meaning of 9 MCAR § 2.111.

D. Limiting capacity of single-phase generators; when permitted.

The Commission, in the Comments, proposed eliminating the last sentence of this section as initially proposed. The Examiner concurred, and the section as adopted reflects this revision from the section as proposed.

In its Statement, the Commission discussed this section as initially proposed as follows:

Utility distribution circuits are generally three-phase or single-phase. Three-phase power is more effective in supplying larger electrical loads than is single-phase. Single-phase distribution circuits are generally supplied from three-phase circuits. In a balanced three-phase circuit, each conductor, or phase, supplies approximately the same amount of power, and the voltage conditions on each phase are approximately equal. If one phase carries considerably more electrical load, or if single-phase generators connected to that phase supply considerably more power than the other two phases, then higher losses or voltage regulation problems, or both, may result.

To protect other customers from voltage and service problems, utilities have for years limited maximum size, starting, and operating characteristics of single-phase motors which may be served from their system. Some generating units are operated as motors in starting up to reach the necessary rpm. Other single-phase generators are also expected to affect local voltage levels in the same way as single-phase motors.

This section is necessary, therefore, to protect service to other customers, just as their service is protected by limitations on motors. It is reasonable because it places no burden on qualifying facilities which are different from the burdens of similar, but nongenerating, customers.

In the Comments, the Commission said:

In response to comments by several qualifying facilities, the Commission is recommending the removal of the limitation of single phase generators to a maximum capacity of 10 kilowatts. In light of the testimony that this restriction is unwarranted, it is reasonable to remove this limitation. However, it should be noted that the utility may limit the capacity of single phase generators in a way consistent with the utility limitations on single phase motors. Thus, the utility's ability to insure the safety and power quality of the system is not impaired.

The Examiner found that this section was needed and reasonable. He also found that the final sentence, as initially proposed, was mere surplusage, and that its deletion did not constitute a substantial change:

Section 3.0462 D. allows the utility to limit the capacity and operating characteristics of a single-phase generator in a way consistent with the utility limitations for single-phase motors when the limitation is necessary to avoid "the likelihood that a qualifying facility would cause problems with the service of other customers".

This provision is necessary to protect the integrity of the utility service received by other utility customers. (Statement of Need and Reasonableness, p. 39.). It is reasonable because it places no burden on a QF which is different from the burden placed on a similar, non-generating customer. Section 3.0462 D., therefore, is necessary and reasonable.

The Commission has stricken from the proposed rule the following language:

Ordinarily, single-phase generators should be limited to a capacity of ten kilowatts.

The deletion was made in response to a number of public comments received. (See, e.g., Pub. Ex. 16, Jacobs Wind Electric Co., p. 16; Pub. Ex. 66, Daryl Jorud, p. 2; Pub. Ex. 67, Russell C. Sletmoen, p. 1; Pub. Ex. 68, Daryl Nelson; and Pub. Ex. 77, Wind Power Systems, Inc., p. 1). For the reasons enumerated in the previous Findings, the Hearing Examiner finds that the language stricken was mere surplusage not qualifying as a general statement of future regulatory effect. Minn. Stat. § 15.0411, subd. 3 (1980). The deletion of surplus language which introduces no change in the test for application of the subsection previously stated does not constitute a substantial change within the meaning of 9 MCAR § 2.111.

The Commission adopts the Examiner's findings and concludes that the need for and reasonableness of this section have been adequately demonstrated. The Commission also concludes that the deletion of the final sentence from the rule as initially proposed does not constitute a substantial change witnin the meaning of 9 MCAR § 2.111.

E. Isolation of generator.

This section as initially proposed allowed a utility to require a qualifying facility to have a system for automatically isolating the generator from the utility's lines upon loss of utility supply. The Commission explained its reasoning for that language in the Statement:

This section of the proposed rule addresses another point of extremely intense controversy: disconnection of the qualifying facility from the utility when the utility line is deenergized.

The need for disconnection is acknowledged by all. Maintenance, such as restoring a line after an outage, must be carried out while the line is deenergized. The generation which comes from a qualifying facility can shock just as severely as the utility's own generation.

The utility's system is designed, through use of devices such as circuit breakers, to automatically isolate a line, or a portion of a line, from the utility's generation when a fault occurs on the line.

Utility work rules require repair crews to open and tag a manual disconnect switch on either side of the fault before beginning work on the line. In addition, the crews are supposed to ground the line on each side of the fault. Utilities have maintained that the safety of their employees requires each qualifying facility to have a manual disconnect switch which is accessible to the utility at all times and which the utility may lock open while performing maintenance.

Qualifying facilities may employ any of several different generating and interconnection technologies. Some of these require an electric signal to be present in the electric utility system in order to operate, while others will generate regardless of whether the utility system is energized.

Some owners and manufacturers of qualifying facilities which use technologies requiring input from the utility system have maintained that a lockable manual disconnect switch should not be required. Because their generator would automatically shut down on the loss of the utility signal, they say, a manual disconnect would be an unnecessary additional expense. They also object to giving the utility unlimited access to their property and ultimate control over their generator. They have recommended instead that a positive disconnect on loss of utility's signal be the only feature required.

Utilities have voiced a concern that under certain conditions of load and operation of qualifying facilities on portions of a distributiuon system it would be possible for several facilities to excite each other and continue to energize the line even after the loss of utility power. The response of owners and manufacturers to this concern has been that the probability of exactly the right conditions occurring is so remote as to be completely negligible, and that without the utility's fixed frequency signal, even if the conditions did occur, generation could not continue beyond a few seconds after loss of utility power.

The Commission believes this section of the proposed rule is reasonable. If a utility requires a qualifying facility to disconnect automatically on loss of utility supply, and if the utility employee properly grounds both sides of the fault before working on it, utility personnel will not be endangered. At the same time, the qualifying facility will not be subjected to needless expense and possible utility harrassment.

During the hearings, the Commission heard testimony from manufacturers of generating equipment and from utilities. As a result of that testimony, the Commission altered this section as finally proposed to allow a utility to require either a system for automatically isolating the generator or a manual disconnect switch. The Commission explained its reasoning for the change in its Comments:

The Commission is recommending that the proposed rule be changed to permit the utility to require that the qualifying facility have a lockable manual disconnection switch readily accessible to the utility. The Commission reached this conclusion after considering several matters.

First, testimony was submitted by Jacobs Wind Electric Company that its equipment would automatically shut down if the utility system was deenergized. However, there was no assurance that all types of equipment which could conceivably be connected to the utility system

would always work in a fail-safe manner. It must be concluded that there is an element of risk associated with automatic disconnect equipment which is not associated with a manual lockable disconnect switch.

Second, although utility work crews are supposed to ground the line on each side of a fault, it was stated in testimony that the crew could be injured while attempting to ground the line if a qualifying facility was sending power into the system.

The Commission believes that requiring a lockable disconnect will not impose an unreasonable burden on the qualifying facility. The benefit of a safer work place for utility personnel outweighs the low cost of a lockable disconnect switch. The Commission also believes that the installation of a lockable manual disconnect switch may aid the qualifying facility in obtaining liability insurance because of the lower risks.

The proposed language should not be construed to require the placement of the lockable manual disconnect switch on the qualifying facility's property. To the contrary, the Commission expects there will be circumstances where the convenience of both parties will be satisfied by locating the switch on the utility's side of the interconnection.

The Hearing Examiner repeated the Commission's concerns that qualifying facilities pose a peculiar hazard upon utility systems, and that there is no assurance that all generating systems will contain internal automatic isolation systems.

He also found that a visible disconnect switch is required for qualifying facilities by the National Electric Code and by the Safety Manual adopted by the State of Minnesota Joint Training and Safety Commission. Further, he found that the State Board of Electricity has determined that the 1981 electric code requires that a qualifying facility have a lockable disconnecting means between the cogenerating equipment and the utility source. Examiner Campbell concluded that an automatic isolation system would not satisfy the State Board of Electricity's requirements because it would not be lockable.

The Examiner reasoned that the section as finally proposed would not meet the need shown in the record because it would allow a utility to impose excessive or conceivably impossible requirements upon a qualifying facility by requiring an automatic isolation system when the generating system already has a manual disconnect, thereby inflating the cost of the qualifying facility, or by exercising its option to require an automatic isolation system when the generating apparatus is incapable of supporting such an automatic system. He recommended the Commission remove the language in this section giving the utility the option to choose which form of isolation system the qualifying facility would have to use.

The Commission agrees. The purpose of this section has always been to provide a safe, effective, and reasonable means of isolating the qualifying facility during periods of loss of utility power. Of particular concern, of course, has been the safety of utility crews working on deenergized utility lines, and of other customers on the same distribution system.

The Commission finds, based upon the record and the Examiner's recommendations, that a manual disconnect switch will be required of all qualifying facilities in order to pass an electrical safety inspection prior to operation. It would be senseless for the Commission to require additional isolation equipment which would not materially improve the safety of the installation but would raise the cost. Similarly, it would be unreasonable for the Commission to allow a utility to impose such an additional requirement upon a qualifying facility. The language in this section as finally proposed was intended to allow flexibility under the assumption that such flexibility was needed. The Commission now finds that the simpler requirement that all qualifying facilities need only have a manual lockable disconnect switch will adequately address the safety needs of an interconnected qualifying facility and utility, and that no additonal complication need be mandated by this section.

The Examiner found that the change now adopted by the Commission would create a section the need for and reasonableness of which had been shown. The Commission adopts the finding of the Examiner.

The Examiner also found that the change to this section now adopted by the Commission would not result in a substantial change. The Commission adopts the Examiner's basis for that finding as follows:

> As previously noted, the important test of substantial change is the presence of reasonable notice to potentially affected persons. American Iron & Steel Institute v. EPA, 568 F. 2d 284, 293 (3d Cir., 1977); International Harvester Co. v. Ruckelshaus, 478 F. 2d 615, 632, n. 51 (D.C. Cir. 1973); South Terminal Corp. v. EPA, 504 F. 2d 646, 659 (1st Cir. 1974). The Notice of Hearing reasonably raised the question of mandated methods of isolation of the qualifying facilities's generator. Moreover, the Statement of Need and Reasonableness specifically discussed the subject of the manual disconnect switch. Statement of Need and Reasonableness, pp. 39-40). The issue of requiring a lockable, manual disconnect switch was thoroughly debated at the hearings. To find that a substantial change results in the change of position by the Commission would lead to the conclusion that an Agency can learn from the comments on its proposals only at the peril of instituting a new rulemaking proceeding. International Harvester Co. v. Ruckelshaus, supra. The change ultimately adopted by the Commission allowing a manual, lockable disconnect switch is a logical "outgrowth" of the rulemaking proceeding. South Terminal Corp. v. EPA, supra. Finally, the amendment suggested by the Hearing Examiner is already required by the State Board of Electricity. (See, Pub. Ex. 78, State Board of Electricity).

The Commission concludes the section as adopted is needed, reasonable, and does not result in a substantial change.

F. Discontinuing parallel operation.

In the Statement, the Commission said that this section was necessary and reasonable for the reasons given in the discussion of the disconnect section. (That discussion has been reproduced under E above.)

The Examiner reported receiving no comments in opposition to this section. He found it necessary and reasonable for the reasons put forward in his discussion of the disconnect section (also reproduced under E above).

The Commission adopts the Examiner's findings, and concludes that the need for and reasonableness of this section have been adequately demonstrated by the Statement.

G. Permitting entry.

The Commission discussed the need for and reasonableness of this section in the Statement as follows:

> This section is necessary to afford the utility and affected communications companies a reasonable opportunity to assure safe and effective operations of their systems in conjunction with parallel electric generation by QF. It reasonably limits the reasons for entry and the times at which entry may be gained. Specifically, entry may occur only during reasonable hours, and only for purposes of evaluating the qualifying facility's impact on system safety and quality of service.

The Examiner found this section necessary and reasonable as proposed, but recommended a minor change:

> Section 3.0462 G. requires a Qualifying Facility to make equipment available and permit entry by "electric and communication utility personnel" to test isolation and protective equipment. Such tests would be conducted to evaluate the quality of power delivered to the utility and to determine whether the QF is responsible for any service problems experienced by the customers of a utility or communication system.
>
> The Commission asserts that this section is necessary to afford the utility and affected communication companies a reasonable opportunity to assure safe and effective operation of their systems in conjunction with the parallel electric generation of the QF.

(Statement of Need and Reasonableness, p. 40). The Commission also asserts that the section reasonably limits the reasons for such entry and the times at which it may occur. (Statement of Need and Reasonableness, p. 40).

A number of utilities testified that allowing entry for purposes of inspection and testing by utility personnel is necessary for the safety of all parties and the proper functioning of the interconnected utility. (See, e.g., Pub. Ex. 65, Ottertail Power Company, p. 19).

The cogenerators and small power producers, however, asserted a need to limit the application of subsection G. Jacobs Wind Electric Company, for example, pointed out that utility personnel are exempt from the State Board of Electricity requirements which apply to the QF's side of the interconnection. (Pub. Ex. 113, Jacobs Wind Electric Co., p. 11; Pub. Ex. 78, State Board of Electricity, p. 1). Further, there is no evidence that the normal electric and communication utility personnel will either be familiar with the equipment used by the QF or qualified to inspect and adjust it. (See, Pub. Ex. 113, Jacobs Wind Electric Co., Reply Comments, p. 11).

The Hearing Examiner finds that § 3.0462 G. is both necessary and reasonable. The concern expressed by Jacobs Wind Electric Company is not a likely occurrence. In the event that unqualified personnel attempt to make an entry, the QF could refuse to allow such personnel to test or adjust the equipment and resolve their reasonableness in doing so under the Commission's complaint procedure. Also, if unqualified personnel damaged the QF's equipment or otherwise interfered with the production of electricity by the QF as a result of their own lack of knowledge and training, the utility affected and the person accomplishing entry would be liable to the QF for damages in tort.

Although the Hearing Examiner has found that § 3.0462 G. is both necessary and reasonable, for purposes of clarity and to avoid misconstruction, the Commission may consider inserting in the second line of G., after the word "permit", and before the word "electric", the word "qualified".

Such an amendment is implicit in § 3.0462 G. and would not constitute a substantial change within the meaning of 9 MCAR § 2.111.

The Commission has reviewed the Examiner's recommendation, and has considered inserting the word "qualified." The Commission has, after consideration, decided not to make that revision. The Examiner pointed out that the qualifying facility has available to it both the dispute resolution procedure of the Commission and the courts for protection against unqualified personnel. The Commission finds that the insertion of the word "qualified" would not change the nature or application of the rule, but would form a potential new focal point for disputes as QF and utilities argue over what constitutes qualified personnel.

The Commission concludes that the need for and reasonableness of this section has been adequately demonstrated by the Statement.

H. Maintaining power output.

This section and the next (I. Varying voltage levels) were discussed together in the Statement:

> These two sections establish a necessary and reasonable requirement that operations of the qualifying facility not disturb the quality of service to other customers through frequency or voltage variations or through introduction of undesirable levels of harmonics. This requirement conforms to the legislative intent that encouragement of cogeneration and small power production be consistent with protection of the ratepayers and the public.

The Examiner found that this section was needed and reasonable:

> Section 3.0462 H. requires the QF to maintain its power output in such a manner that frequency and voltage produced are compatible with the utility's normal service and do not cause the prohibited degradation of such service.

Section 3.0462 H. is both necessary and reasonable since a balancing of the interests of the customers of the utility and the QF require that the service to the customer not be degraded as a result of interconnection. The only comment received on this section of the proposed rules suggested that the word "standard" contained in the fifth line of § 3.0462 H. should be deleted as being unduly vague because standard limitations on service do not exist in the utility industry. (See, Pub. Ex. 16, Jacobs Wind Electric Co., p. 17). It is suggested that the word "customary" be inserted in lieu of ithe word "standard" in the rule. The Hearing Examiner finds that the two words are synonyms and that the inclusion of the word "standard" in the rule does not render it impermissibly vague.

The Commission adopts the Examiner's findings, and concludes that the need for and reasonableness of this section have been adequately demonstrated by the Statement.

I. Varying voltage levels.

This section has been revised in accordance with the Examiner's recommendations.

The Commission's discussion of the need for and reasonableness of this section was reproduced under H above.

The Examiner found that this section was necessary, but would require revision to become reasonable:

> Section 3.0462 I. requires that a Qualifying Facility be operated so that variations from "acceptable voltage levels and other service-impairing disturbances" do not adversely affect other utility customers and so that the facility does not produce "undesirable levels of harmonics" in the utility's power supply.
>
> The Commission asserts that § 3.0462 I. is both reasonable and necessary for the reasons discussed in the previous Finding.
>
> A number of utilities suggested embellishment of the language to insert additional operating characteristics on the quality of power provided by the QF. (See, Pub. Ex. 6, NSP, p. 19; Pub. Ex. 10, Minnesota Power, p. 10: and Pub. Ex. 117, MMUA Reply Comments, p. 23).
>
> Jacobs Wind Electric Company testified that the word "undesirable" as modifying levels of harmonics in § 3.0462 I. is impermissibly vague and may be used by a utility as a method of oppression.
>
> The Hearing Examiner finds that the subsection is necessary to establish the responsibility of the QF for the safe operation of its generating capacity in harmony with the electric service provided by the utility to its customers. Such a balancing of interests is inherent in Minn. Stat. § 2168.164, subd. 1 (1981 Supp.).
>
> The Comment of Jacobs Wind Electric Company that the word "undesirable" is impermissibly vague and may be used by a utility to discourage cogeneration and small power production is persuasive. There is no standard in the proposed rule governing when or at what level harmonics become "undesirable". Further, the party that determines undesirability is not identified. What is undesirable to the utility may not be undesirable to another customer or even the Commission. Hence, § 3.0462 I. is unreasonable.
>
> To correct the defect, the Commission should strike the word "undesirable" in the second to last line of § 3.0462 I. and substituted after the word "harmonics" in the same line language substantially similar to the following language suggested by Jacobs Wind Electric Company"
>
> which exceed the prescribed limits of Commission rules or other levels customarily accepted.
>
> (See Pub. Ex. 16, Jacobs Wind Electric Co., p. 17).

The Commission has adopted the change recommended by the Examiner. The Commission adopts the Examiner's findings, and concludes that the need for and reasonableness of this section have been adequately demonstrated. The revision to the section as initially proposed is in the nature of clarification of language which was "impermissibly vague." The Commission concludes that this revision does not constitute a substantial change within the meaning of 9 MCAR § 2.111.

J. Safety.

This section has been revised from the section as initially proposed in accordance with the Examiner's recommendations.

The Statement discussed the section as initially proposed as follows:

> This section is necessary to establish the location of responsibility for safety and protection of equipment owned by the qualifying facility. It reasonably places that responsibility with the qualifying facility, not the utility. It warns a potential owner of the responsibility and suggests investigation of a particular piece of equipment which may be necessary.

The Examiner found that the first sentence of the section as initially proposed was necessary and reasonable, while the second was surplusage:

> Section 3.0462 J. states that a Qualifying Facility shall be responsible for operating its equipment in adherence to all applicable national, state and local codes. The section adds the following advisory statement:
>
> The design and configuration of certain cogeneration and small power production equipment might require an isolation transformer as part of the qualifying facility's installation for safety and protection of the qualifying facility equipment.
>
> The Commission asserts that this subsection is necessary to fix the responsibility for safety and protection of equipment owned by the QF. It states that the section is reasonable in that it places the burden for the protection and maintenance of the equipment on the owner of the equipment who has created any additional resulting risk. Such an allocation of responsibilities is inherent in the legislative intent expressed in Minn. Stat. § 216B.164, subd. 1 (1981 Supp.).
>
> The Hearing Examiner finds that, for the reasons relied upon by the Commission in its Statement of Need and Reasonableness, the first sentence of § 3.0462 J. is both necesssry and reasonable. (See, Statement of Need and Reasonableness, p. 40).
>
> For the reasons stated in Finding 127, supra, however, the Hearing Examiner finds that the advisory statement contained in the second sentence of § 3.0462 J. is either mere surplusage or, if an additional requirement beyond that expressed in the first sentence is meant to be imposed, is impermissibly vague. It contains no statement of conditions under which an isolation transformer may be required of a QF for reasons of safety. The reasonableness of the second sentence of § 3.0462 J. of the proposed rules, therefore, has not been demonstrated by an affirmative presentation of facts in the record.
>
> To correct the defect, the Commission should delete the second sentence of § 3.0462 J.

The Commission has made the revision recommended by the Examiner. The Commission adopts the Examiner's findings, and concludes that the need for and reasonableness of this section as adopted have been adequately demonstrated. The Commission finds that the deletion of the second section of the section as initially proposed does not change the application of the rule, and concludes that this deletion does not constitute a substantial change within the meaning of 9 MCAR § 2.111.

K. Right of appeal for excessive technical requirements.

The Statement contained the following discussion of this section.

The purpose of this provision is to protect the qualifying facility against unreasonable demands of the utility where such demands have the effect of discouraging cogeneration and small power production, and where such demands are not warranted to insure safety, protection of equipment, quality of service, or protection of ratepayers. This provision is necessary to carry out the legislative mandate that disputes must be determined by the Commission.

The Examiner found that it was necessary and reasonable:

Section 3.0462 K. allows the Qualifying Facility to appeal to the Commission if it considers the technical requirements for interconnection imposed by the utility to be unreasonable. Section 3.0462 K. is both necessary and reasonable as a consequence of Minn. Stat. § 2168.164, subd. 5 (1981 Supp.), and as a more specific statement of the Commission's dispute resolution authority contained in § 3.0460.

The Commission adopts the Examiner's findings, and concludes that the need for and reasonableness of this section have been adequately demonstrated by the Statement.

4 MCAR § 3.0463 Existing contracts.

In the Statement, the Commission stated its basis for including a section allowing the reopening of existing cogeneration and small power production contracts as follows:

The Commission is aware that qualifying facilities have begun interconnected operations with utilities around the state, and is aware that contracts have been executed between qualifying facilities and utilities in conjunction with these operations. The Commission has to date received two formal complaints (Docket No. E-002/C-82-117 and E-148/C-81-5486) concerning the terms and conditions of the contracts being offered by the utilities.

All utilities covered by the proposed rules will be required, under 4 MCAR § 3.0452 (D) to file for Commission review and approval all their standard contracts. The Commission will thus approve the form of all contracts to be executed between utilities and qualifying facilities.

The Commission believes it would be unreasonable to create, through inaction, two classes of qualifying facilities: one with unreviewed and unapproved contracts, the other with reviewed and approved contracts. The Commission has previously found that its jurisdiction extends to the provisions of contracts which were privately negotiated between an electric utility and its retail customers. Anoka Electric Cooperative, Docket No. U-75-103 (February 24, 1977). The Commission has scrutinized contractual rate provisions and abrogated provisions it has found to be unlawfully discriminatory, Minnesota Power and Light Company, Docket No. E-015/GR-76-408 (December 18, 1976), or preferential, Minnesota Power and Light Company, Docket No. E-015/GR-77-360 (February 3, 1978).

On appeal of the latter case, the St. Louis County District Court upheld the Commission's right to investigate and, after notice, to abrogate contracts. This provision of the proposed rules is necessary to provide notice to utilities and qualifying facilities that contracts drawn and executed before the effective date of the proposed rules may be replaced with a standard, approved contract under the proposed rules.

It is reasonable to permit either party to reopen a pre-rule contract, since the provisions of the standard, approved contract are as likely to work in favor of one party as the other.

The Commission made no additional remarks on this section in the Comments.

The Examiner found the intent of this section to be retroactive rulemaking. While no participant introduced evidence into the record as to the legal limitations on the Commission's authority in this area, the Examiner found that the Commission has authority to adopt retroactive rules by virtue

of the general rulemaking authority in M.S. § 216B.164, subd. 6. He reasoned that a valid administrative rule has the force and effect of law. When acting in a legislative capacity, Examiner Campbell stated, an agency has the ability, in a fashion parallel to the legislature, to make rules retroactive, absent constitutional impediments, if it is reasonable to do so. He found clear intent in the language of this section to make the rule retroactive, and concluded that the section could be promulgated if it could withstand constitutional challenge.

He reviewed the general constitutional prohibition against the impairment of contracts, and traced the evolution of court review from a strict application of the contract clause of the United States Constitution through the modern interpretation that states may exercise their police powers, even if private contracts are modified or abrogated thereby, when the state's actions serve a legitimate public purpose and are limited to those provisions necessary to achieve that purpose.

Further, he reasoned that a regulatory agency must exercise its ability to abrogate pre-existing contracts in accordance with the limitations on the exercise of such authority with respect to private contracts generally. This would mean that an abrogation must be made upon reasonable conditions and be of a character appropriate to the public purpose justifying its adoption.

The Examiner found that the Commission had failed to present on the record any documentation of the public purpose that it was seeking to achieve through this section. Without a clearly stated public purpose, he was unable to determine if the section would be necessary and reasonable within the constitutional prohibitions he had earlier described.

Examiner Campbell concluded that this section as proposed violated the prohibition in the Minnesota and United States Constitutions against a state adopting a law impairing an existing contract, and recommended that the Commission either strike the section from the rules or reconvene the hearings to provide a record that would support a redrafted section.

Under M.S. § 14.15, subd. 4, and M. S. § 14.16, the Commission has three choices when, as here, a Hearing Examiner finds that the need for and reasonableness of a proposed rule have not been shown. The Commission may take the action recommended by the Examiner to correct the defect, it may modify the rule in a fashion other than that suggested by the Examiner, or it may submit the proposed rule to the Legislative Commission to Review Administrative Rules (LCRAR) for the LCRAR's comments.

The Commission believes both the second and third choices would be inappropriate here. Making changes other than those suggested by Examiner Campbell is unlikely, given the clear and strong position he took in his Report, to result in any change in his position, and would merely cause delay. Submitting the proposed rules to the LCRAR with this section intact would insure that no portion of the rules would go forward until the LCRAR had completed its review. Under M.S. § 14.15, subd. 4, the LCRAR is allowed 30 days for that review. The Commission believes that the subject matter of these rules is too important to unnecessarily delay further.

Within the first choice, the Examiner left two courses of action open to the Commission: delete the section or reconvene the hearings for further support of a redrafted section. The Commission is unwilling at this time to delay the adoption of all the proposed rules by reconvening the hearings, and has therefore deleted this section from the rules as adopted.

The Commission remains concerned with the possible discrimination noted in the Statement. That discrimination, now that the Commission has ceded jurisdiction over non-rate-regulated utilities prior to interconnection, could take two forms. First is the problem of excessively burdensome contractural requirements prior to an initial interconnection. Second is the problem of inter-customer discrimination after an initial interconnection.

On the first problem, the Commission notes its general complaint authority under M. S. § 216B.17. As to cooperative electric associations, M.S. § 216B.17, subd. 6a, authorizes the Commission, upon complaint or upon its own motion, to investigate the cooperative's service standards or practices. The Minnesota Supreme Court reviewed a decision of the Commission regarding the meaning of this subdivision in Beltrami Electric Cooperative v. Minnesota Public Utilities Commission, 319 NW 2nd 52 (1982). The Court faced the question of whether a cooperative's policy on deposits for connecting

mobile homes to electric service was a "rate" as defined in M.S. § 216B.02, subd. 5, or a "service" as defined in M.S. § 216B.02, subd. 6. The Court noted the limiting language of M.S. § 216B.17, subd. 6a, and stated, "A statutory provision enacted to reduce unnecessary bureaucracy in rate-setting does not remove from the Commission the authority to prohibit arbitrary and discriminatory barriers to the provision of service." 319 NW 2nd at 56. The Court found the connection policy to be a condition of service which the Commission could review.

The Commission believes that the provisions of an interconnection contract are similarly conditions of service: the provisions of a contract establishing the terms and conditions under which energy will be bought and sold between a utility and a qualifying facility concern the installation of equipment for delivering and measuring electricity, and can be scrutinized to assure they are not arbitrary and discriminatory barriers to the provision of interconnected service. The Commission would expect to receive complaints from qualifying facilities who felt that initial interconnection contracts offered by non-rate-regulated cooperatives were unreasonable or unjustly discriminatory, and would expect to resolve those complaints under M.S. § 216B.17.

As to municipal electric utilities, M.S. § 216B.17, subd. 6, authorizes the Commission to hear, determine, and adjust complaints concerning rates and services upon petition of ten percent of the non-resident consumers of the municipal utility or 25 such non-resident consumers, whichever is less. Thus, the subject matter over which the Commission has jurisdiction for complaints about a municipal utility is broader and covers the terms and conditions of interconnection, but the circumstances under which the Commission could hear a complaint are more narrow. Only if ten percent of the utility's consumers who live outside the city limits (or 25 of those consumers, whichever is fewer) complain to the Commission about the utility's cogeneration rates or practices could the Commission hear a complaint about an initial interconnection contract.

In addition, the protections of Federal law that require interconnection apply here as well. 16 USC § 824a-3(h)(2)(B) allows a qualifying facility to petition the FERC to enforce its rules or to seek judicial enforcement.

The second problem could arise where a non-rate-regulated utility required an interconnection contract with its first qualifying facility that contained terms contrary to these rules. Once that initial qualifying facility signed the contract and became interconnected with the non-rate-regulated utility, these rules would cover the utility and require that any interconnection contracts signed thereafter not conflict with the rules. In those circumstances, one qualifying facility could have a contract markedly different and, from the qualifying facility's viewpoint, inferior to any and all other qualifying facilities.

Under those circumstances, the Commission would rely upon M. S. § 216B.164, subd. 5, which gives the Commission the ability to resolve disputes between an electric utility and a qualifying facility, and would expect to use as a standard of review the intent of M. S. § 216B.07, which prohibits a public utility from granting an unreasonable preference or advantage to any person or persons or from subjecting any person to any unreasonable prejudice or disadvantage. Such dispute resolution would be on a case-by-case basis.

The Commission is satisfied that these statutory provisions will afford a considerable measure of protection against the potential abuses of initial interconnection. Of course, should this prove not to be the case, and should interconnection of qualifying facilities into the systems of all the state's utilities proceed at a rate slower than the Commission expects to be the case, or should there be an unmanageable number of individual disputes, a rules hearing to amend the adopted rules to add a section dealing with contracts could be convened.

III. MISCELLANEOUS FINDINGS

The Examiner made two miscellaneous findings in his Report in addition to his discussion of the text of the proposed rules.

First, he rejected the suggestion of MMUA that the rules contain a detailed variance provision. He felt that a variance provision would be desirable, but found that MMUA's suggestion would improperly give unfettered discretion to the Commission.

The Examiner incorrectly stated that the Commission's existing rules do not contain a variance provision. On October 26, 1981, at 6 SR 723, the Commission publisned final notice of the adoption of a Variance Rule. That rule, codified as 4 MCAR § 3.0600, now covers variances to all the Commission's rules, and will permit variances to be made to these rules when necessary and appropriate.

Second, the Examiner suggested that the Commission capitalize defined terms within the body of the rules, so as to avoid ambiguity and unnecessary confusion. The Commission agrees that such capitalization would avoid ambiguity and unnecessary confusion, but is unable to adopt the Examiner's suggestion. Under M.S. § 14.07, subd. 2, and M.S. § 14.08, the Revisor of Statutes alone determines the form of agency rules. The Revisor's current style requirements preclude capitalization of defined terms within the text of rules, and the Commission nas no choice but to comply.

ORDER

1. The rules governing cogeneration and small power production, appended hereto as Attachment A, are hereby adopted.

2. This Order shall become effective immediately.

BY ORDER OF THE COMMISSION

Randall D. Young
Executive Secretary

SERVICE DATE: MAR 7 1983

(S E A L)

List of April 1, 2015 Filed Documents

Document ID (as listed in eDockets)	Label in eDockets	Summary of Document	Other
20154-108803-02	Reply Comments—Annual Cogen Production Tariff	Cover letter plus one page Schedule C listing calculation of Average Retail Coop Energy Rate	Cover letter dated March 17, 2015 but was not filed in eDockets until April 1, 2015
20154-108803-08	Reply Comments—12-09 Qualifying Facilities Report for the Reporting Period	April 24, 2014 letter to complainant explaining the reason for the $5 monthly fee; also includes computer entries and e-mails regarding fee	Label in eDockets is incorrect; this is not the QF report from Docket 12-09.
20154-108803-07	Reply Comments—2013 Schedule PG-1, PG-1B &PG-1C; Cogeneration & Small Power Production	Spreadsheet/report for Docket 12-09 (Annual QF report); is dated January 15, 2014	This report was not filed in eDockets in 12-09. The company offers no explanation on why it is filled out but never filed in the docket on time.
20154-108806-01	Reply Comments—Additional Requested Information on Policies and Procedures	Policy of Peoples Energy Cooperative, #201 (Application and other procedures for non-net-metered DG)	Last revised on Feb 19, 2015
20154-108803-01	Reply Comments—Response Letter on Dispute	March 24, 2015 Cover letter responding to Commission Notice	Although cover letter is dated March 24, 2015, was not filed in eDockets until April 1, 2015
20154-108803-09	Reply Comments	E-mails between Commission staff and Peoples on a customer complaint	No reply comments are attached to the e-mails.
20154-108806-02	Reply Comments—Additional Requested Information on Policies and Procedures	Policy of Peoples Energy Cooperative, #203 (Application and other procedures for net-metered DG)	Revised Feb 19, 2015
20154-108803-05	Reply Comments—Distributed Generation Interconnection Report	QF Report for Docket 15-9	Dated March 16, 2015
20154-108806-09	Reply Comments—Additional Requested Information on Policies and Procedures	Policy of Peoples Energy Cooperative, #2.1 (Terms, conditions, and tariffs for DG)	Last revised Feb 29, 2012; reviewed Feb 25, 2013
20154-108803-04	Reply Comments—Cogeneration and Small Power Production	QF Annual Report for Docket 15-10	Form says reporting period is 1/1/2014-12/31-2014, but date submitted is March 16, 2014.
20154-108806-08	Reply Comments—Additional Requested Information on Policies and Procedures	29 page document on DG Interconnection Requirements	
20154-108806-05	Reply Comments—	Peoples Energy	Document does not match

	Additional Requested Information on Policies and Procedures	Cooperative Interconnection Agreement (18 pages)	the signed agreement Peoples produced in response to Department IRs.
20154-108803-03	Reply Comments—Feb 2015 Schedule PG-1, PG1B & PG1C	Schedules PG-1, PG1B, PG1C rates effective Feb 2015 Rider for DG, effective Feb 2013 Rider for Standby Service, effective Feb 2014 Schedule PG-2, Wholesale capacity and energy	
20154-108806-06	Reply Comments—Additional Requested Information on Policies and Procedures	Peoples Management Operating Guide #2D1, Mgmt of DG Accounts	Last Revised October 27, 2014; Reviewed Feb 19, 2015
20154-108806-04	Reply Comments—Additional Requested Information on Policies and Procedures	Uniform Statewide Contract for Cogeneration and Small Power Production Facilities	Revised Feb 19, 2015
20154-108806-07	Reply Comments—Additional Requested Information on Policies and Procedures	Peoples' Interconnection Process for DG Systems, 20 pages	
20154-108806-03	Reply Comments—Additional Requested Information on Policies and Procedures	Peoples' Interconnection Application	Revised Feb 19, 2015
20154-108806-10	Reply Comments—Additional Requested Information on Policies and Procedures	Peoples Management Operating Guide #2d Mgmt of DG Accounts	Revised Feb 19, 2012; reviewed Feb 25, 2013
20154-108803-06	Reply Comments—QF Report	Cover letter with rate schedules, riders, and terms and conditions of service	Cover letter is dated January 31, 2014 but has no docket number on it; no record of being filed in eDockets in 2014.

Search Results

Search Criteria - Search Returned 167 Results

- **Docket Number:** 14-9
- **Results per Page:** All

To view the document, click the link in the document ID column. Trade secret documents are not viewable for unauthorized users.
Click the column heading to sort the results.

New Search Modify Search Subscribe

Document ID	Class	Docket #	Subscribe	Docket Type	On Behalf Of	Document Type	Received Date
20156-111690-01	PUBLIC	14-09	☐	PR	AGRALITE ELECTRIC COOPERATIVE	COMPLIANCE FILING--COGEN	06/23/2015
20156-111690-02	TRADE SECRET	14-09	☐	PR	AGRALITE ELECTRIC COOPERATIVE	COMPLIANCE FILING--COGEN	06/23/2015
20153-108412-01	PUBLIC	14-09	☐	PR	MINNESOTA POWER	REPORT--REVISED 2013 QUALIFYING FACILITIES COVER LETTER AND AFFIDAVIT	03/19/2015
20153-108412-02	PUBLIC	14-09	☐	PR	MINNESOTA POWER	REPORT--REVISED 2013 QUALIFYING FACILITIES REPORT	03/19/2015
20152-107504-01	PUBLIC	14-09	☐	PR	SPRING VALLEY UTILITIES	REPORT--QUALIFYING FACILITIES REPORT	02/20/2015
201412-105462-01	PUBLIC	14-09	☐	PR	AVANT ENERGY, AGENT FOR MINNESOTA MUNICIPAL POWER AGENCY	REPORT--COMPLIANCE FILING	12/16/2014
20146-100991-01	TRADE SECRET	14-09	☐	PR	OTTER TAIL POWER COMPANY	REPORT--PURPA 210 BIENNIAL REPORT	06/30/2014
20146-100991-02	PUBLIC	14-09	☐	PR	OTTER TAIL POWER COMPANY	REPORT--PURPA 210 BIENNIAL REPORT	06/30/2014
20144-98253-01	PUBLIC	14-09	☐	PR	CITY OF CHASKA	REPORT--QF REPORT	04/11/2014
20144-98156-01	PUBLIC	14-09	☐	PR	REDWOOD ELECTRIC COOPERATIVE	REPORT--QUALIFYING FACILITIES REPORT	04/09/2014
20144-98100-01	PUBLIC	14-09	☐	PR	RUNESTONE ELECTRIC	REPORT	04/08/2014
20144-98048-01	PUBLIC	14-09	☐	PR	GLENCOE LIGHT AND POWER	REPORT	04/07/2014

					COMMISSION		
20144-97939-01	PUBLIC	14-09	☐	PR	TRI-COUNTY ELECTRIC COOPERATIVE	REPORT	04/03/2014
20144-97901-01	PUBLIC	14-09	☐	PR	SAUK CENTRE PUBLIC UTILITIES COMMISSION	REPORT--UPDATED DATA	04/02/2014
20143-97591-01	PUBLIC	14-09	☐	PR	MINNESOTA POWER	REPORT--2013 QUALIFYING FACILITIES REPORT PART 1 OF 2	03/25/2014
20143-97591-02	PUBLIC	14-09	☐	PR	MINNESOTA POWER	REPORT--2013 QUALIFYING FACILITIES REPORT PART 2 OF 2	03/25/2014
20143-97522-01	PUBLIC	14-09	☐	PR	ELBOW LAKE MUNICIPAL POWER	REPORT	03/24/2014
20143-97263-01	PUBLIC	14-09	☐	PR	FREEBORN-MOWER COOPERATIVE SERVICES	REPORT--2013 QF REPORT	03/12/2014
20143-97137-03	PUBLIC	14-09	☐	PR	BROWN COUNTY RURAL ELECTRICAL ASSOCIATION	REPORT--2 OF 2	03/07/2014
20143-97137-01	PUBLIC	14-09	☐	PR	BROWN COUNTY RURAL ELECTRICAL ASSOCIATION	REPORT--1 OF 2	03/07/2014
20143-97024-01	PUBLIC	14-09	☐	PR	MINNESOTA VALLEY ELECTRIC COOPERATIVE	REPORT	03/04/2014
20143-97024-02	TRADE SECRET	14-09	☐	PR	MINNESOTA VALLEY ELECTRIC COOPERATIVE	REPORT	03/04/2014
20143-97011-01	PUBLIC	14-09	☐	PR	XCEL ENERGY	REPORT--1 OF 2 ANNUAL COGEN QF REPORT	03/03/2014
20143-97015-01	PUBLIC	14-09	☐	PR	INTERSTATE POWER AND LIGHT COMPANY	COMPLIANCE FILING--QUALIFYING FACILITIES REPORT	03/03/2014
20143-97011-02	PUBLIC	14-09	☐	PR	XCEL ENERGY	REPORT--2 OF 2	03/03/2014
20142-96938-02	PUBLIC	14-09	☐	PR	WELLS PUBLIC UTILITIES	REPORT--2 OF 2	02/28/2014
20142-96920-01	PUBLIC	14-09	☐	PR	MINNESOTA VALLEY ELECTRIC COOPERATIVE	REPORT	02/28/2014
20142-96954-01	PUBLIC	14-09	☐	PR	WRIGHT HENNEPIN COOPERATIVE ELECTRIC ASSOC	REPORT	02/28/2014
20142-96910-02	PUBLIC	14-09	☐	PR	NORTH BRANCH MUNICIPAL WATER & LIGHT	REPORT--2 OF 2	02/28/2014
20142-96899-01	PUBLIC	14-09	☐	PR	RED RIVER VALLEY COOPERATIVE POWER ASSOCIATION	COMPLIANCE FILING	02/28/2014
20142-96895-01	PUBLIC	14-09	☐	PR	WASECA UTILITIES	COMPLIANCE FILING	02/28/2014
20142-96910-01	PUBLIC	14-09	☐	PR	NORTH BRANCH MUNICIPAL WATER & LIGHT	REPORT--1 OF 2	02/28/2014
20142-					LITCHFIELD		

96922-01	PUBLIC	14-09	☐	PR	PUBLIC UTILITIES	REPORT--1 OF 2	02/28/2014
20142-96954-02	TRADE SECRET	14-09	☐	PR	WRIGHT HENNEPIN COOPERATIVE ELECTRIC ASSOC	REPORT	02/28/2014
20142-96947-01	PUBLIC	14-09	☐	PR	OWATONNA PUBLIC UTILITIES	REPORT--1 OF 2	02/28/2014
20142-96951-02	PUBLIC	14-09	☐	PR	AUSTIJN UTILITIES	REPORT--DOCUMENT 2 OF 2	02/28/2014
20142-96944-01	PUBLIC	14-09	☐	PR	CROW WING POWER	REPORT	02/28/2014
20142-96893-01	PUBLIC	14-09	☐	PR	GRAND MARAIS PUBLIC UTILITIES COMMISSION	REPORT	02/28/2014
20142-96938-01	PUBLIC	14-09	☐	PR	WELLS PUBLIC UTILITIES	REPORT--1 OF 2	02/28/2014
20142-96915-01	PUBLIC	14-09	☐	PR	ROCHESTER PUBLIC UTILTITES	REPORT	02/28/2014
20142-96941-01	TRADE SECRET	14-09	☐	PR	CROW WING POWER	REPORT	02/28/2014
20142-96892-01	PUBLIC	14-09	☐	PR	FAIRMONT PUBLIC UTILITIES	REPORT	02/28/2014
20142-96948-01	PUBLIC	14-09	☐	PR	WRIGHT HENNEPIN COOPERATIVE ELECTRIC ASSOC	REPORT	02/28/2014
20142-96922-02	PUBLIC	14-09	☐	PR	LITCHFIELD PUBLIC UTILITIES	REPORT--2 OF 2	02/28/2014
20142-96951-01	PUBLIC	14-09	☐	PR	AUSTIJN UTILITIES	REPORT--DOCUMENT 1 OF 2	02/28/2014
20142-96894-01	PUBLIC	14-09	☐	PR	SPRING VALLEY PUBLIC UTILITIES	REPORT	02/28/2014
20142-96941-02	PUBLIC	14-09	☐	PR	CROW WING POWER	REPORT	02/28/2014
20142-96947-02	PUBLIC	14-09	☐	PR	OWATONNA PUBLIC UTILITIES	REPORT--2 OF 2	02/28/2014
20142-96851-01	PUBLIC	14-09	☐	PR	MINNESOTA VALLEY COOPERATIVE LIGHT AND POWER	REPORT	02/27/2014
20142-96882-02	PUBLIC	14-09	☐	PR	NEW PRAGUE UTILITIES COMMISSION	REPORT--2 OF 2	02/27/2014
20142-96886-01	PUBLIC	14-09	☐	PR	RENVILLE-SIBLEY COOPERATIVE POWER ASSOCIATION	REPORT	02/27/2014
20142-96882-01	PUBLIC	14-09	☐	PR	NEW PRAGUE UTILITIES COMMISSION	REPORT--1 OF 2	02/27/2014
20142-96846-01	PUBLIC	14-09	☐	PR	BRAINERD PUBLIC UTILITIES	REPORT--QF REPORT	02/27/2014
20142-96874-01	PUBLIC	14-09	☐	PR	REDWOOD FALLS PUBLIC UTILITIES	COMPLIANCE FILING	02/27/2014
20142-96884-01	PUBLIC	14-09	☐	PR	NEW ULM PUBLIC UTILITIES	REPORT--QF REPORTING 2013 USE	02/27/2014
20142-96823-01	PUBLIC	14-09	☐	PR	DAKOTA ELECTRIC	REPORT--ANNUAL QF	02/26/2014

					ASSOCIATION	REPORT	
20142-96789-05	PUBLIC	14-09	☐	PR	CITY OF LAKE CITY	COMPLIANCE FILING--D	02/26/2014
20142-96789-01	PUBLIC	14-09	☐	PR	CITY OF LAKE CITY	COMPLIANCE FILING--A	02/26/2014
20142-96797-01	PUBLIC	14-09	☐	PR	SOUTH CENTRAL ELECTRIC ASSN.	REPORT	02/26/2014
20142-96829-01	PUBLIC	14-09	☐	PR	FREEBORN-MOWER COOPERATIVE SERVICES	COMPLIANCE FILING--COGENERATION AND SMALL POWER PRODUCTION TARIFF	02/26/2014
20142-96802-01	PUBLIC	14-09	☐	PR	LYON-LINCOLN ELECTRIC COOPERATIVE, INC.	REPORT	02/26/2014
20142-96789-02	PUBLIC	14-09	☐	PR	CITY OF LAKE CITY	COMPLIANCE FILING--B	02/26/2014
20142-96830-03	PUBLIC	14-09	☐	PR	FREEBORN-MOWER COOPERATIVE SERVICES	COMPLIANCE FILING--F-COGENERATION AND SMALL POWER PRODUCTION TARIFF	02/26/2014
20142-96789-07	PUBLIC	14-09	☐	PR	CITY OF LAKE CITY	COMPLIANCE FILING--COVER	02/26/2014
20142-96803-01	PUBLIC	14-09	☐	PR	FAIRMONT PUBLIC UTILITIES	REPORT	02/26/2014
20142-96790-01	PUBLIC	14-09	☐	PR	CITY OF LAKE CITY	REPORT	02/26/2014
20142-96800-01	PUBLIC	14-09	☐	PR	GRAND MARAIS PUBLIC UTILITIES	REPORT	02/26/2014
20142-96789-03	PUBLIC	14-09	☐	PR	CITY OF LAKE CITY	COMPLIANCE FILING--G	02/26/2014
20142-96789-06	PUBLIC	14-09	☐	PR	CITY OF LAKE CITY	COMPLIANCE FILING--F	02/26/2014
20142-96830-01	PUBLIC	14-09	☐	PR	FREEBORN-MOWER COOPERATIVE SERVICES	COMPLIANCE FILING--D-COGENERATION AND SMALL POWER PRODUCTION TARIFF	02/26/2014
20142-96827-01	PUBLIC	14-09	☐	PR	SPRING VALLEY PUBLIC UTILITIES	REPORT	02/26/2014
20142-96789-04	PUBLIC	14-09	☐	PR	CITY OF LAKE CITY	COMPLIANCE FILING--C	02/26/2014
20142-96830-02	PUBLIC	14-09	☐	PR	FREEBORN-MOWER COOPERATIVE SERVICES	COMPLIANCE FILING--E-COGENERATION AND SMALL POWER PRODUCTION TARIFF	02/26/2014
20142-96772-01	PUBLIC	14-09	☐	PR	NORTH STAR ELECTRIC COOPERATIVE, INC., BAUDETTE, MN	REPORT	02/25/2014
20142-96779-01	PUBLIC	14-09	☐	PR	PRINCETON PUBLIC UTILITIES	COMPLIANCE FILING	02/25/2014
20142-96753-01	PUBLIC	14-09	☐	PR	STEARNS ELECTRIC ASSOCIATION	REPORT	02/25/2014
20142-96774-01	PUBLIC	14-09	☐	PR	NORTH STAR ELECTRIC COOPERATIVE, INC., BAUDETTE, MN	REPORT	02/25/2014

20142-96788-01	PUBLIC	14-09	☐	PR	WASECA UTILITIES	COMPLIANCE FILING	02/25/2014
20142-96763-02	PUBLIC	14-09	☐	PR	CONNEXUS ENERGY	COMPLIANCE FILING	02/25/2014
20142-96756-01	PUBLIC	14-09	☐	PR	CITY OF ANOKA	REPORT	02/25/2014
20142-96781-02	PUBLIC	14-09	☐	PR	PRESTON PUBLIC UTILITIES	REPORT--2 OF 2	02/25/2014
20142-96763-01	TRADE SECRET	14-09	☐	PR	CONNEXUS ENERGY	COMPLIANCE FILING	02/25/2014
20142-96781-01	PUBLIC	14-09	☐	PR	PRESTON PUBLIC UTILITIES	REPORT--1 OF 2	02/25/2014
20142-96730-01	PUBLIC	14-09	☐	PR	NOBLES COOPERATIVE ELECTRIC	REPORT	02/24/2014
20142-96727-01	PUBLIC	14-09	☐	PR	ROCHESTER PUBLIC UTILITIES	REPORT	02/24/2014
20142-96693-01	PUBLIC	14-09	☐	PR	OTTER TAIL POWER COMPANY	REPORT--COVER LETTER - ANNUAL COGEN AND SMALL POWER PRODUCTION REPORT	02/21/2014
20142-96686-03	PUBLIC	14-09	☐	PR	STEARNS ELECTRIC ASSOCIATION	REPORT	02/21/2014
20142-96686-01	PUBLIC	14-09	☐	PR	STEARNS ELECTRIC ASSOCIATION	REPORT	02/21/2014
20142-96701-01	PUBLIC	14-09	☐	PR	RED LAKE ELECTRTIC COOPERATIVE, INC.	REPORT	02/21/2014
20142-96693-02	PUBLIC	14-09	☐	PR	OTTER TAIL POWER COMPANY	REPORT--ANNUAL COGEN AND SMALL POWER PRODUCTION REPORT	02/21/2014
20142-96686-02	TRADE SECRET	14-09	☐	PR	STEARNS ELECTRIC ASSOCIATION	REPORT	02/21/2014
20142-96671-01	PUBLIC	14-09	☐	PR	SIOUX VALLEY SOUTHWESTERN ELECTRIC DBA SIOUX VALLEY ENERGY	REPORT	02/20/2014
20142-96651-01	PUBLIC	14-09	☐	PR	LAKE REGION ELECTRIC COOPERATIVE	REPORT	02/20/2014
20142-96660-01	PUBLIC	14-09	☐	PR	ITASCA-MANTRAP ELECTRIC COOPERATIVE	REPORT	02/20/2014
20142-96663-01	PUBLIC	14-09	☐	PR	AITKIN PUBLIC UTILITIES	REPORT	02/20/2014
20142-96638-01	PUBLIC	14-09	☐	PR	CITY OF TWO HARBORS	REPORT	02/20/2014
20142-96672-01	PUBLIC	14-09	☐	PR	SIOUX VALLEY SOUTHWESTERN ELECTRIC DBA SIOUX VALLEY ENERGY	REPORT	02/20/2014
20142-96646-01	PUBLIC	14-09	☐	PR	MCLEOD COOPERATIVE POWER ASSOCIATION	REPORT	02/20/2014
20142-96645-01	PUBLIC	14-09	☐	PR	EAST CENTRAL ENERGY	REPORT	02/20/2014
20142-96623-03	PUBLIC	14-09	☐	PR	BROWN COUNTY RURAL ELECTRICAL	REPORT--14-10	02/19/2014

					ASSOCIATION		
20142-96617-02	PUBLIC	14-09	☐	PR	GOODHUE COUNTY COOPERATIVE ELECTRIC ASSOCIATION	REPORT--14-9	02/19/2014
20142-96623-01	PUBLIC	14-09	☐	PR	BROWN COUNTY RURAL ELECTRICAL ASSOCIATION	REPORT--14-9	02/19/2014
20142-96617-04	PUBLIC	14-09	☐	PR	GOODHUE COUNTY COOPERATIVE ELECTRIC ASSOCIATION	REPORT--14-10	02/19/2014
20142-96550-01	PUBLIC	14-09	☐	PR	DETROIT LAKES PUBLIC UTILITIES	REPORT	02/18/2014
20142-96563-01	PUBLIC	14-09	☐	PR	LANESBORO PUBLIC UTILITIES	REPORT	02/18/2014
20142-96542-01	PUBLIC	14-09	☐	PR	MILLE LACS ENERGY COOEPRATIVE	REPORT	02/18/2014
20142-96560-01	PUBLIC	14-09	☐	PR	ALEXANDRIA LIGHT AND POWER	COMPLIANCE FILING	02/18/2014
20142-96567-03	PUBLIC	14-09	☐	PR	WILD RICE ELECTRIC COOPERATIVE INC	REPORT--7835.1400 FORM	02/18/2014
20142-96561-01	PUBLIC	14-09	☐	PR	WILD RICE ELECTRIC COOPERATIVE INC	REPORT--QUALIFYING FACILITIES REPORT PART 1 AND PART 2	02/18/2014
20142-96542-02	TRADE SECRET	14-09	☐	PR	MILLE LACS ENERGY COOEPRATIVE	REPORT	02/18/2014
20142-96554-01	PUBLIC	14-09	☐	PR	MILLE LACS ENERGY COOPERATIVE	REPORT	02/18/2014
20142-96558-02	PUBLIC	14-09	☐	PR	TRI-COUNTY ELECTRIC COOPERATIVE	REPORT--1 OF 2	02/18/2014
20142-96567-01	TRADE SECRET	14-09	☐	PR	WILD RICE ELECTRIC COOPERATIVE INC	REPORT--2013 AVERAGE RETAIL UTILITY RATES	02/18/2014
20142-96568-01	PUBLIC	14-09	☐	PR	EAST CENTRAL ENERGY	REPORT	02/18/2014
20142-96558-04	PUBLIC	14-09	☐	PR	TRI-COUNTY ELECTRIC COOPERATIVE	REPORT--2 OF 2	02/18/2014
20142-96567-02	TRADE SECRET	14-09	☐	PR	WILD RICE ELECTRIC COOPERATIVE INC	REPORT--CO GENERATION APPLICATIONS AND MEMBER NOTIFICATION	02/18/2014
20142-96574-01	PUBLIC	14-09	☐	PR	STEELE-WASECA COOPERATIVE ELECTRIC	REPORT--QUALIFYING FACILITIES REPORT	02/18/2014
20142-96524-01	PUBLIC	14-09	☐	PR	AVANT ENERGY AGENT FOR MINNESOTA MUNICIPAL POWER AGENCY	COMPLIANCE FILING	02/18/2014
20142-96447-04	PUBLIC	14-09	☐	PR	BENCO ELCTRIC COOPERATIVE	REPORT--2 OF 2	02/14/2014
20142-96470-01	PUBLIC	14-09	☐	PR	CITY OF BUFFALO MUNICIPAL ELECTRIC	REPORT--1 OF 2	02/14/2014
20142-96488-01	PUBLIC	14-09	☐	PR	SAUK CENTRE PUBLIC	REPORT--2013 QF REPORT 2-	02/14/2014

					UTILITIES	14-2014	
20142-96470-02	PUBLIC	14-09	☐	PR	CITY OF BUFFALO MUNICIPAL ELECTRIC	REPORT--2 OF 2	02/14/2014
20142-96447-02	PUBLIC	14-09	☐	PR	BENCO ELCTRIC COOPERATIVE	REPORT--1 OF 2	02/14/2014
20142-96402-01	PUBLIC	14-09	☐	PR	ADRIAN PUBLIC UTILITIES	REPORT	02/13/2014
20142-96412-01	TRADE SECRET	14-09	☐	PR	LYON-LINCOLN ELECTRIC COOPERATIVE, INC.	REPORT	02/13/2014
20142-96414-01	PUBLIC	14-09	☐	PR	MOORHEAD PUBLIC SERVICE	REPORT	02/13/2014
20142-96412-02	PUBLIC	14-09	☐	PR	LYON-LINCOLN ELECTRIC COOPERATIVE, INC.	REPORT	02/13/2014
20142-96411-01	PUBLIC	14-09	☐	PR	LYON-LINCOLN ELECTRIC COOPERATIVE, INC.	REPORT	02/13/2014
20142-96410-01	PUBLIC	14-09	☐	PR	NORTH ITASCA ELECTRIC COOPERATIVE INC.	REPORT	02/13/2014
20142-96410-02	TRADE SECRET	14-09	☐	PR	NORTH ITASCA ELECTRIC COOPERATIVE INC.	REPORT	02/13/2014
20142-96378-01	PUBLIC	14-09	☐	PR	MARSHALL MUNICIPAL UTILITIES	REPORT	02/12/2014
20142-96384-01	PUBLIC	14-09	☐	PR	XCEL ENERGY	COMPLIANCE FILING--TARIFF SHEETS AND BILL INSERT	02/12/2014
20142-96390-01	PUBLIC	14-09	☐	PR	RUNESTONE ELECTRIC ASSOCIATION	COMPLIANCE FILING	02/12/2014
20142-96390-02	TRADE SECRET	14-09	☐	PR	RUNESTONE ELECTRIC ASSOCIATION	COMPLIANCE FILING	02/12/2014
20142-96344-01	PUBLIC	14-09	☐	PR	SOUTH CENTRAL ELECTRIC ASSN.	REPORT	02/11/2014
20142-96296-01	PUBLIC	14-09	☐	PR	WORTHINGTON PUBLIC UTILITIES	LETTER	02/10/2014
20142-96261-01	PUBLIC	14-09	☐	PR	BARNESVILLE MUNICIPAL UTILITY	LETTER	02/07/2014
20142-96224-01	PUBLIC	14-09	☐	PR	TODD-WADENA ELECTRIC COOPERATIVE	REPORT	02/06/2014
20142-96224-02	TRADE SECRET	14-09	☐	PR	TODD-WADENA ELECTRIC COOPERATIVE	REPORT	02/06/2014
20142-96223-02	TRADE SECRET	14-09	☐	PR	TODD-WADENA ELECTRIC COOPERATIVE	REPORT	02/06/2014
20142-96223-01	PUBLIC	14-09	☐	PR	TODD-WADENA ELECTRIC COOPERATIVE	REPORT	02/06/2014
20142-96128-02	TRADE SECRET	14-09	☐	PR	LAKE COUNTRY POWER	REPORT--	02/03/2014
20142-96128-01	PUBLIC	14-09	☐	PR	LAKE COUNTRY POWER	REPORT--	02/03/2014
20141-96058-01	PUBLIC	14-09	☐	PR	NEW ULM PUBLIC UTILITIES	REPORT--COGENERATION AND SMALL POWER PRODUCTION TARIFF SCHEDULE A-H	01/31/2014

						2013	
20141-95803-01	PUBLIC	14-09	☐	PR	AVANT ENERGY AGENT FOR MINNESOTA MUNICIPAL POWER AGENCY	COMPLIANCE FILING	01/27/2014
20141-95755-01	PUBLIC	14-09	☐	PR	RENVILLE-SIBLEY COOPERATIVE POWER ASSOCIATION	REPORT--REVISED SCH C & I	01/24/2014
20141-95745-02	TRADE SECRET	14-09	☐	PR	RENVILLE-SIBLEY COOPERATIVE POWER ASSOCIATION	INITIAL FILING--SCHEDULE H	01/24/2014
20141-95745-01	PUBLIC	14-09	☐	PR	RENVILLE-SIBLEY COOPERATIVE POWER ASSOCIATION	INITIAL FILING--SCHEDULE C & I	01/24/2014
20141-95622-02	PUBLIC	14-09	☐	PR	MINNESOTA VALLEY COOPERATIVE LIGHT AND POWER	COMPLIANCE FILING	01/21/2014
20141-95622-01	TRADE SECRET	14-09	☐	PR	MINNESOTA VALLEY COOPERATIVE LIGHT AND POWER	COMPLIANCE FILING	01/21/2014
20141-95484-02	TRADE SECRET	14-09	☐	PR	COOPERATIVE LIGHT & POWER	REPORT	01/15/2014
20141-95484-01	PUBLIC	14-09	☐	PR	COOPERATIVE LIGHT & POWER	REPORT	01/15/2014
20141-95271-02	PUBLIC	14-09	☐	PR	DAKOTA ELECTRIC ASSOCIATION	REPORT	01/09/2014
20141-95271-01	TRADE SECRET	14-09	☐	PR	DAKOTA ELECTRIC ASSOCIATION	REPORT	01/09/2014
20141-95283-02	PUBLIC	14-09	☐	PR	BENCO ELECTRIC COOPERATIVE	REPORT	01/09/2014
20141-95283-01	TRADE SECRET	14-09	☐	PR	BENCO ELECTRIC COOPERATIVE	REPORT	01/09/2014
20141-95247-01	PUBLIC	14-09	☐	PR	RED RIVER VALLEY COOPERATIVE POWER ASSOCIATION	LETTER	01/08/2014
20141-95138-02	TRADE SECRET	14-09	☐	PR	BROWN COUNTY RURAL ELECTRICAL ASSOCIATION	REPORT	01/06/2014
20141-95138-01	PUBLIC	14-09	☐	PR	BROWN COUNTY RURAL ELECTRICAL ASSOCIATION	REPORT	01/06/2014
20141-95093-01	PUBLIC	14-09	☐	PR	STEELE-WASECA COOPERATIVE ELECTRIC	COMPLIANCE FILING--PART 1 OF 2 ANNUAL COGENERATION FILING	01/03/2014
20141-95093-04	TRADE SECRET	14-09	☐	PR	STEELE-WASECA COOPERATIVE ELECTRIC	COMPLIANCE FILING--PART 2 OF 2. ANNUAL COGENERATION FILING	01/03/2014
20141-95093-02	PUBLIC	14-09	☐	PR	STEELE-WASECA COOPERATIVE ELECTRIC	COMPLIANCE FILING--PART 2 OF 2. ANNUAL COGENERATION FILING	01/03/2014
20141-	TRADE				STEELE-WASECA	COMPLIANCE FILING--PART 1	

95093-03	SECRET	14-09	☐	PR	COOPERATIVE ELECTRIC	OF 2 ANNUAL COGENERATION FILING	01/03/2014
20141-95053-02	PUBLIC	14-09	☐	PR	NOBLES COOPERATIVE ELECTRIC	REPORT	01/02/2014
20141-95053-01	TRADE SECRET	14-09	☐	PR	NOBLES COOPERATIVE ELECTRIC	REPORT	01/02/2014
20141-95087-01	TRADE SECRET	14-09	☐	PR	XCEL ENERGY	REPORT	01/02/2014
20141-95087-02	PUBLIC	14-09	☐	PR	XCEL ENERGY	REPORT	01/02/2014

CSV | Excel | PDF

New Search **Modify Search** Subscribe

Search Results

Search Criteria - Search Returned 120 Results

- **Docket Number:** 14-10
- **Results per Page:** All

To view the document, click the link in the document ID column. Trade secret documents are not viewable for unauthorized users.
Click the column heading to sort the results.

New Search Modify Search Subscribe

Document ID	Class	Docket #	Subscribe	Docket Type	On Behalf Of	Document Type	Received Date
20143-97815-01	PUBLIC	14-10	☐	PR	REDWOOD ELECTRIC COOPERATIVE	REPORT	04/01/2014
20143-97815-02	TRADE SECRET	14-10	☐	PR	REDWOOD ELECTRIC COOPERATIVE	REPORT	04/01/2014
20143-97518-01	PUBLIC	14-10	☐	PR	HUTCHINSON UTILITIES COMMISSION	REPORT	03/24/2014
20143-97238-01	PUBLIC	14-10	☐	PR	CITY OF WADENA	REPORT–DOC 1OF 1	03/11/2014
20143-97158-01	PUBLIC	14-10	☐	PR	FREEBORN-MOWER COOPERATIVE SERVICES	COMPLIANCE FILING	03/10/2014
20143-97134-01	PUBLIC	14-10	☐	PR	CITY OF STEPHEN	REPORT	03/07/2014
20143-97137-02	PUBLIC	14-10	☐	PR	BROWN COUNTY RURAL ELECTRICAL ASSOCIATION	REPORT–1 OF 2	03/07/2014
20143-97137-04	PUBLIC	14-10	☐	PR	BROWN COUNTY RURAL ELECTRICAL ASSOCIATION	REPORT–2 OF 2	03/07/2014
20143-97063-01	PUBLIC	14-10	☐	PR	LAKE COUNTRY POWER	REPORT	03/04/2014
20143-97004-01	PUBLIC	14-10	☐	PR	MEEKER COOPERATIVE LIGHT AND POWER	REPORT–1 OF 2	03/03/2014
20143-96988-01	PUBLIC	14-10	☐	PR	CONNEXUS ENERGY	COMPLIANCE FILING	03/03/2014
20143-96991-01	PUBLIC	14-10	☐	PR	BELTRAMI ELECTRIC COOPERATVIE, INC	REPORT	03/03/2014
20143-96995-01	PUBLIC	14-10	☐	PR	INTERSTATE POWER AND LIGHT COMPANY	REPORT--DISTRIBUTED GENERATION INTERCONNECTION REPORT	03/03/2014
20143-97004-02	PUBLIC	14-10	☐	PR	MEEKER COOPERATIVE LIGHT AND	REPORT–2 OF 2	03/03/2014

					POWER		
20143-96989-01	PUBLIC	14-10	☐	PR	GLENCOE LIGHT AND POWER COMMISSION	REPORT	03/03/2014
20142-96940-01	PUBLIC	14-10	☐	PR	CROW WING POWER	REPORT	02/28/2014
20142-96927-01	PUBLIC	14-10	☐	PR	CITY OF LUVERNE	REPORT--ON 13-10 FORM	02/28/2014
20142-96966-04	PUBLIC	14-10	☐	PR	AGRALITE ELECTRIC COOPERATIVE	REPORT--4 OF 8	02/28/2014
20142-96930-04	PUBLIC	14-10	☐	PR	XCEL ENERGY	REPORT--2013 ANNUAL DG REPORT TEMPLATE	02/28/2014
20142-96966-01	PUBLIC	14-10	☐	PR	AGRALITE ELECTRIC COOPERATIVE	REPORT--1 OF 8	02/28/2014
20142-96826-02	PUBLIC	14-10	☐	PR	SPRING VALLEY PUBLIC UTILITIES	REPORT--2 OF 2	02/28/2014
20142-96930-03	TRADE SECRET	14-10	☐	PR	XCEL ENERGY	REPORT--2013 ANNUAL DG REPORT TEMPLATE	02/28/2014
20142-96928-01	PUBLIC	14-10	☐	PR	CITY OF LUVERNE	REPORT--ON 13-10 FORM	02/28/2014
20142-96966-05	PUBLIC	14-10	☐	PR	AGRALITE ELECTRIC COOPERATIVE	REPORT--5 OF 8	02/28/2014
20142-96966-06	PUBLIC	14-10	☐	PR	AGRALITE ELECTRIC COOPERATIVE	REPORT--6 OF 8	02/28/2014
20142-96937-01	PUBLIC	14-10	☐	PR	WELLS PUBLIC UTILITIES	COMPLIANCE FILING	02/28/2014
20142-96943-01	PUBLIC	14-10	☐	PR	AGRALITE ELECTRIC COOPERATIVE	REPORT--ON 13-10 REPORT	02/28/2014
20142-96917-01	PUBLIC	14-10	☐	PR	MINNESOTA VALLEY ELECTRIC COOPERATIVE	REPORT	02/28/2014
20142-96896-01	PUBLIC	14-10	☐	PR	REDWOOD FALLS PUBLIC UTILITIES	REPORT--1 OF 5	02/28/2014
20142-96900-01	PUBLIC	14-10	☐	PR	RED RIVER VALLEY COOPERATIVE POWER ASSOCIATION	COMPLIANCE FILING	02/28/2014
20142-96913-01	PUBLIC	14-10	☐	PR	LITCHFIELD PUBLIC UTILITIES	REPORT	02/28/2014
20142-96896-05	PUBLIC	14-10	☐	PR	REDWOOD FALLS PUBLIC UTILITIES	REPORT--5 OF 5	02/28/2014
20142-96896-04	PUBLIC	14-10	☐	PR	REDWOOD FALLS PUBLIC UTILITIES	REPORT--4 OF 5	02/28/2014
20142-96908-01	PUBLIC	14-10	☐	PR	NORTH BRANCH MUNICIPAL WATER & LIGHT	REPORT	02/28/2014
20142-96966-08	PUBLIC	14-10	☐	PR	AGRALITE ELECTRIC COOPERATIVE	REPORT--8 OF 8	02/28/2014
20142-96896-02	PUBLIC	14-10	☐	PR	REDWOOD FALLS PUBLIC UTILITIES	REPORT--2 OF 5	02/28/2014
20142-96930-02	PUBLIC	14-10	☐	PR	XCEL ENERGY	REPORT--2013 ANNUAL DG REPORT	02/28/2014
20142-96896-03	PUBLIC	14-10	☐	PR	REDWOOD FALLS PUBLIC UTILITIES	REPORT--3 OF 5	02/28/2014
20142-96955-01	PUBLIC	14-10	☐	PR	TODD-WADENA ELECTRIC COOPERATIVE	REPORT	02/28/2014
					WRIGHT		

20142-96950-01	PUBLIC	14-10	☐	PR	HENNEPIN COOPERATIVE ELECTRIC ASSOC	REPORT	02/28/2014
20142-96966-03	PUBLIC	14-10	☐	PR	AGRALITE ELECTRIC COOPERATIVE	REPORT--3 OF 8	02/28/2014
20142-96966-09	TRADE SECRET	14-10	☐	PR	AGRALITE ELECTRIC COOPERATIVE	REPORT--1 OF 1	02/28/2014
20142-96930-01	TRADE SECRET	14-10	☐	PR	XCEL ENERGY	REPORT--2013 ANNUAL DG REPORT	02/28/2014
20142-96952-01	PUBLIC	14-10	☐	PR	OWATONNA PUBLIC UTILITIES	REPORT	02/28/2014
20142-96966-07	PUBLIC	14-10	☐	PR	AGRALITE ELECTRIC COOPERATIVE	REPORT--7 OF 8	02/28/2014
20142-96949-01	PUBLIC	14-10	☐	PR	AUSTIN UTILITIES	REPORT	02/28/2014
20142-96966-02	PUBLIC	14-10	☐	PR	AGRALITE ELECTRIC COOPERATIVE	REPORT--2 OF 8	02/28/2014
20142-96885-01	PUBLIC	14-10	☐	PR	RENVILLE-SIBLEY COOPERATIVE POWER ASSOCIATION	REPORT	02/27/2014
20142-96881-01	PUBLIC	14-10	☐	PR	NEW PRAGUE UTILITIES COMMISSION	REPORT	02/27/2014
20142-96883-01	PUBLIC	14-10	☐	PR	NEW ULM PUBLIC UTILITIES	REPORT--DG INTERCONNECTION REPORTING FOR 2013 USE	02/27/2014
20142-96847-01	PUBLIC	14-10	☐	PR	BRAINERD PUBLIC UTILITIES	REPORT	02/27/2014
20142-96824-01	PUBLIC	14-10	☐	PR	DAKOTA ELECTRIC ASSOCIATION	REPORT--ANNUAL DG REPORT	02/26/2014
20142-96795-01	PUBLIC	14-10	☐	PR	WESTBROOK PUBLIC UTILITIES	REPORT	02/26/2014
20142-96826-01	PUBLIC	14-10	☐	PR	SPRING VALLEY PUBLIC UTILITIES	REPORT--1 OF 2	02/26/2014
20142-96816-01	PUBLIC	14-10	☐	PR	MINNESOTA VALLEY COOPERATIVE LIGHT AND POWER	REPORT	02/26/2014
20142-96799-02	PUBLIC	14-10	☐	PR	GRAND MARAIS PUBLIC UTILITIES	REPORT--2 OF 2	02/26/2014
20142-96801-01	PUBLIC	14-10	☐	PR	FAIRMONT PUBLIC UTILITIES	COMPLIANCE FILING--1 OF 2	02/26/2014
20142-96801-02	PUBLIC	14-10	☐	PR	FAIRMONT PUBLIC UTILITIES	COMPLIANCE FILING--2 OF 2	02/26/2014
20142-96799-01	PUBLIC	14-10	☐	PR	GRAND MARAIS PUBLIC UTILITIES	REPORT--1 OF 2	02/26/2014
20142-96798-01	PUBLIC	14-10	☐	PR	SOUTH CENTRAL ELECTRIC ASSN.	REPORT	02/26/2014
20142-96791-01	PUBLIC	14-10	☐	PR	CITY OF LAKE CITY	REPORT	02/26/2014
20142-96754-01	PUBLIC	14-10	☐	PR	STEARNS ELECTRIC ASSOCIATION	REPORT	02/25/2014
20142-96782-01	PUBLIC	14-10	☐	PR	HUTCHINSON UTILITIES COMMISSION	REPORT	02/25/2014
20142-96778-01	PUBLIC	14-10	☐	PR	PRINCETON PUBLIC	COMPLIANCE FILING--1 OF 2	02/25/2014

					UTILITIES		
20142-96780-01	PUBLIC	14-10	☐	PR	PRESTON PUBLIC UTILITIES	REPORT--1 OF 2	02/25/2014
20142-96755-01	PUBLIC	14-10	☐	PR	CITY OF ANOKA	REPORT	02/25/2014
20142-96773-01	PUBLIC	14-10	☐	PR	NORTH STAR ELECTRIC COOPERATIVE, INC, BAUDETTE, MN	REPORT	02/25/2014
20142-96787-01	PUBLIC	14-10	☐	PR	WASECA UTILITIES	REPORT--1 OF 2	02/25/2014
20142-96780-02	PUBLIC	14-10	☐	PR	PRESTON PUBLIC UTILITIES	REPORT--2 OF 2	02/25/2014
20142-96778-02	PUBLIC	14-10	☐	PR	PRINCETON PUBLIC UTILITIES	COMPLIANCE FILING--2 OF 2	02/25/2014
20142-96787-02	PUBLIC	14-10	☐	PR	WASECA UTILITIES	REPORT--2 OF 2	02/25/2014
20142-96731-01	PUBLIC	14-10	☐	PR	NOBLES COOPERATIVE ELECTRIC	REPORT	02/24/2014
20142-96745-02	PUBLIC	14-10	☐	PR	BLOOMING PRAIRIE PUBLIC UTILITIES	REPORT--2 OF 3	02/24/2014
20142-96745-01	PUBLIC	14-10	☐	PR	BLOOMING PRAIRIE PUBLIC UTILITIES	REPORT--1 OF 3	02/24/2014
20142-96745-03	PUBLIC	14-10	☐	PR	BLOOMING PRAIRIE PUBLIC UTILITIES	REPORT--3 OF 3	02/24/2014
20142-96733-01	PUBLIC	14-10	☐	PR	ELBOW LAKE MUNICIPAL POWER	REPORT--2013 DISTRIBUTION GENERATION INTERCONNECTION REPORT	02/24/2014
20142-96699-01	PUBLIC	14-10	☐	PR	RED LAKE ELECTRIC COOPERATIVE, INC.	COMPLIANCE FILING	02/21/2014
20142-96661-01	PUBLIC	14-10	☐	PR	ITASCA-MANTRAP ELECTRIC COOPERATIVE	REPORT	02/20/2014
20142-96637-01	PUBLIC	14-10	☐	PR	CITY OF TWO HARBORS	REPORT	02/20/2014
20142-96675-01	PUBLIC	14-10	☐	PR	SIOUX VALLEY SOUTHWESTERN ELECTRIC DBA SIOUX VALLEY ENERGY	REPORT--CORRECTED VERSION	02/20/2014
20142-96664-01	PUBLIC	14-10	☐	PR	AITKIN PUBLIC UTILITIES	REPORT	02/20/2014
20142-96652-01	PUBLIC	14-10	☐	PR	LAKE REGION ELECTRIC COOPERATIVE	REPORT	02/20/2014
20142-96669-01	PUBLIC	14-10	☐	PR	TODD-WADENA ELECTRIC COOPERATIVE	REPORT	02/20/2014
20142-96636-01	PUBLIC	14-10	☐	PR	WINDOM MUNICIPAL UTLITY	REPORT	02/20/2014
20142-96617-01	PUBLIC	14-10	☐	PR	GOODHUE COUNTY COOPERATIVE ELECTRIC ASSOCIATION	REPORT--14-9	02/19/2014
20142-96617-03	PUBLIC	14-10	☐	PR	GOODHUE COUNTY COOPERATIVE ELECTRIC ASSOCIATION	REPORT--14-10	02/19/2014
20142-96627-01	PUBLIC	14-10	☐	PR	SIOUX VALLEY ENERGY	REPORT	02/19/2014
					BROWN COUNTY		

20142-96623-04	PUBLIC	14-10	☐	PR	RURAL ELECTRICAL ASSOCIATION	REPORT--14-10	02/19/2014
20142-96590-01	PUBLIC	14-10	☐	PR	LAKEFIELD PUBLIC UTILITIES	REPORT	02/19/2014
20142-96623-02	PUBLIC	14-10	☐	PR	BROWN COUNTY RURAL ELECTRICAL ASSOCIATION	REPORT--14-9	02/19/2014
20142-96600-01	PUBLIC	14-10	☐	PR	CITY OF BRECKENRIDGE PUBLIC UTILITIES	REPORT	02/19/2014
20142-96549-01	TRADE SECRET	14-10	☐	PR	MILLE LACS ENERGY COOPERATIVE	REPORT	02/18/2014
20142-96497-01	PUBLIC	14-10	☐	PR	AVANT ENERGY AGENT FOR MINNESOTA MUNICIPAL POWER AGENCY	REPORT	02/18/2014
20142-96558-01	PUBLIC	14-10	☐	PR	TRI-COUNTY ELECTRIC COOPERATIVE	REPORT--1 OF 2	02/18/2014
20142-96558-03	PUBLIC	14-10	☐	PR	TRI-COUNTY ELECTRIC COOPERATIVE	REPORT--2 OF 2	02/18/2014
20142-96562-01	PUBLIC	14-10	☐	PR	LANESBORO PUBLIC UTILITIES	REPORT	02/18/2014
20142-96576-01	PUBLIC	14-10	☐	PR	STEELE-WASECA COOPERATIVE ELECTRIC	REPORT--DISTRIBUTED GENERATION INTERCONNECTION REPORT	02/18/2014
20142-96528-01	PUBLIC	14-10	☐	PR	ROCHESTER PU	COMPLIANCE FILING	02/18/2014
20142-96546-01	PUBLIC	14-10	☐	PR	DETROIT LAKES PUBLIC UTILITIES	REPORT	02/18/2014
20142-96571-01	PUBLIC	14-10	☐	PR	EAST CENTRAL ENERGY	REPORT	02/18/2014
20142-96549-02	PUBLIC	14-10	☐	PR	MILLE LACS ENERGY COOPERATIVE	REPORT	02/18/2014
20142-96557-01	PUBLIC	14-10	☐	PR	LANESBORO PUBLIC UTILITIES	REPORT	02/18/2014
20142-96449-01	PUBLIC	14-10	☐	PR	MARSHALL MUNICIPAL UTILITIES	LETTER	02/14/2014
20142-96447-01	PUBLIC	14-10	☐	PR	BENCO ELCTRIC COOPERATIVE	REPORT--1 OF 2	02/14/2014
20142-96447-03	PUBLIC	14-10	☐	PR	BENCO ELCTRIC COOPERATIVE	REPORT--2 OF 2	02/14/2014
20142-96465-01	PUBLIC	14-10	☐	PR	CITY OF BUFFALO MUNICIPAL ELECTRIC	REPORT	02/14/2014
20142-96413-01	PUBLIC	14-10	☐	PR	MOORHEAD PUBLIC SERVICE	REPORT	02/13/2014
20142-96388-01	PUBLIC	14-10	☐	PR	LYON-LINCOLN ELECTRIC COOPERATIVE, INC.	REPORT	02/12/2014
20142-96295-01	PUBLIC	14-10	☐	PR	WORTHINGTON PUBLIC UTILITIES	REPORT	02/10/2014
20142-96244-01	PUBLIC	14-10	☐	PR	BARNESVILLE MUNICIPAL UTILITY	COMPLIANCE FILING	02/07/2014
20142-96161-01	PUBLIC	14-10	☐	PR	ALP UTILITIES (FORMERLY ALEXANDRIA LIGHT AND POWER)	COMPLIANCE FILING	02/04/2014

20142-96169-01	PUBLIC	14-10	☐	PR	CITY OF MELROSE PUBLIC UTILITIES	REPORT--2013 ANNUAL DISTRIBUTED INTERCONNECTION REPORT	02/04/2014
20142-96164-01	PUBLIC	14-10	☐	PR	ADRIAN PUBLIC UTILITIES	REPORT	02/04/2014
20142-96131-01	PUBLIC	14-10	☐	PR	INTERSTATE POWER AND LIGHT COMPANY	REPORT--2013 DISTRIBUTED GENERATION INTERCONNECTION REPORT	02/03/2014
20141-96037-01	PUBLIC	14-10	☐	PR	OTTER TAIL POWER COMPANY	REPORT-- DISTRIBUTED GENERATION INTERCONNECTION REPORT	01/31/2014
20141-96074-01	TRADE SECRET	14-10	☐	PR	OTTER TAIL POWER COMPANY	REPORT--ANNUAL UPDATE FILING OF DG RATES	01/31/2014
20141-96074-02	PUBLIC	14-10	☐	PR	OTTER TAIL POWER COMPANY	REPORT--ANNUAL UPDATE FILING OF DG RATES	01/31/2014
20141-95996-01	PUBLIC	14-10	☐	PR	SAUK CENTRE PUBLIC UTILITIES COMMISSION	REPORT--ANNUAL DG REPORT 2013	01/30/2014
20141-95897-01	PUBLIC	14-10	☐	PR	MINNESOTA POWER	REPORT--ANNUAL DG CONNECTION REPORT	01/29/2014
20141-95577-01	PUBLIC	14-10	☐	PR	BENSON MUNICIPAL ELECTRIC UTILITY	REPORT--2013 DISTRIBUTED GENERATION INTERCONNECTION REPORT	01/17/2014

CSV | Excel | PDF

New Search Modify Search Subscribe