

REDWOOD ELECTRIC COOPERATIVE COGENERATION **RULES IMPLEMENTING 216B.164**

A. DEFINITIONS.

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

Subp. 2. Average retail cooperative energy rate. "Average retail cooperative energy rate" means, for any class of Cooperative member, 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. For purposes of determining the "average retail cooperative energy rate" the Cooperative may consider a retail demand rate as a fixed charge and may exclude such annual revenue from the calculation. Data from the most recent 12-month period available must be used in the computation.

Subp. 3. Backup power. "Backup power" means electric energy or capacity supplied by the Cooperative 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, and is measured by the number of kilowatts alternating current at the point of common coupling between a qualifying facility and a Cooperative's electric system during a 15-minute interval period.

Subp. 5. Capacity costs. "Capacity costs" means the costs associated with providing the capability to deliver energy. The Cooperative capital costs consist of the costs of facilities from the Cooperative and the Cooperative's wholesale provider used to generate, transmit, and distribute electricity and the fixed operating and maintenance costs of these facilities.

Subp. 6. Cooperative. "Cooperative" means the Redwood Electric Cooperative.

Subp. 6a. Member. "Member" as defined by the bylaws of the Cooperative, means any person, firm, association, or corporation, or any agency of the federal, state, or local government being supplied with service by the Cooperative.

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 Cooperative with at least a 65 percent on-peak capacity factor in the month.

The capacity factor is based upon the qualifying facility's maximum metered capacity delivered to the Cooperative during the on-peak hours for the month.

Subp. 10. Interconnection costs. "Interconnection costs" means the reasonable costs of connection, switching, metering, transmission, distribution, safety provisions, and administrative costs incurred by the Cooperative 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 costs the Cooperative would incur in selling electricity to the qualifying facility as a non-generating Member.

Subp. 11. Interruptible power. "Interruptible power" means electric energy or capacity supplied by the Cooperative to a qualifying facility subject to interruption under the provisions of the Cooperative's tariff applicable to the retail class of members to which the qualifying facility would belong irrespective of its ability to generate electricity.

Subp. 12. Maintenance power. "Maintenance power" means electric energy or capacity supplied by the Cooperative during scheduled outages of the qualifying facility.

Subp. 13. On-peak hours. "On-peak hours" means either those hours formally designated by the Cooperative 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. 14. Point of common coupling. "Point of common coupling" means the point where the qualifying facility's generation system, including the point of generator output, is connected to the Cooperative's electric power grid.

Subp. 15. Purchase. "Purchase" means the purchase of electric energy or capacity or both from a qualifying facility by the Cooperative.

Subp. 16. Qualifying facility. "Qualifying facility" means a cogeneration or small power production facility which satisfies the conditions established in Code of Federal Regulations, title 18, part 292. 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. The qualifying facilities must be owned by the Member.

Subp. 17. Sale. "Sale" means the sale of electric energy or capacity or both by the Cooperative to a qualifying facility.

Subp. 18a. Standby charge. "Standby charge" means the charge imposed by the Cooperative upon a qualifying facility for the recovery of costs for the provision of standby services necessary to make electricity service available to the qualifying facility.

Subp. 18b. Standby service. "Standby service" means the service to potentially provide electric energy or capacity supplied by the Cooperative to a qualifying facility greater than 40 kW.

Subp. 19. Supplementary power. "Supplementary power" means electric energy or capacity supplied by the Cooperative which is regularly used by a qualifying facility in addition to that which the facility generates itself.

Subp. 20. System emergency. "System emergency" means a condition on a Cooperative's system which is imminently likely to result in significant disruption of service to customers or to endanger life or property.

B. SCOPE AND PURPOSE.

The purpose of these rules are 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; and the Federal Energy Regulatory Commission regulations, Code of Federal Regulations, title 18, part 292. These rules shall 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.

C. FILING REQUIREMENTS

Annually the Cooperative shall file for review and approval, a cogeneration and small power production tariff with its Board of Directors. The tariff must contain schedules 1 - 5

Subpart 1. Schedule 1. Schedule 1 shall contain the calculation of the average retail cooperative energy rates to be updated annually.

Subp. 2. Schedule 2. Schedule 2 shall contain all standard contracts to be used with qualifying facilities, containing applicable terms and conditions.

Subp. 3. Schedule 3. Schedule 3 shall contain the Cooperative's adopted interconnection process, safety standards and technical requirements for distributed energy resource systems.

Subp. 4. Schedule 4. Schedule 4 shall contain procedures for notifying affected qualifying facilities of any periods of time when the Cooperative 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.

Subp. 5. Schedule 5. Schedule 5 shall contain the estimated average incremental energy costs by seasonal, peak and off-peak periods for the Cooperative's power supplier from which energy purchases are first avoided. Schedule 5 shall also contain

the net annual avoided capacity costs, if any, stated per kilowatt-hour and averaged over the on-peak hours and over all hours for the Cooperative's power supplier from which capacity purchases are first avoided. Both the average incremental energy costs and net annual avoided capacity costs shall be increased by a factor equal to 50 percent of the Cooperative and the Cooperative's power supplier's overall line losses due to distribution, transmission and transformation of electric energy.

D. AVAILABILITY OF FILINGS.

All filings shall be maintained at the Cooperative's general office and any other office of the Cooperative where rate tariffs are kept. The filings shall be made available for Member inspections during normal business hours. To the extent possible, Cooperative shall supply the current year's distributed generation rates, interconnection procedures and applications on the Cooperative website.

E. REPORTING REQUIREMENTS

Annually the Cooperative shall report to the Cooperative Board of Directors for their review and approval an annual report including information in Subp. 1 – 3. The Cooperative shall still comply with other federal and state reporting of distributed generation to federal and state agencies expressly required by statute.

Subpart. 1. Summary of Average Retail Cooperative Energy Rate. A summary of the qualifying facilities that are currently served under average retail cooperative energy rate.

Subp. 2. Other Qualifying Facilities. A summary of the qualifying facilities that are not currently served under average retail cooperative energy rate.

Subp. 3. Wheeling. A summary of the wheeling undertaken with respect to qualifying facilities.

F. CONDITIONS OF SERVICE

Subpart. 1. Requirement to Purchase. The Cooperative shall purchase energy and capacity from any qualifying facility which offers to sell energy and capacity to the Cooperative and agrees to the conditions in these rules.

Subp. 2. Written Contract. A written contract shall be executed between the qualifying facility and the Cooperative.

G. ELECTRICAL CODE COMPLIANCE.

Subpart 1. Compliance; standards. The interconnection between the qualifying facility and the Cooperative must comply with the requirements in the most recently published edition of the National Electrical Safety Code issued by the Institute of Electrical and Electronics Engineers. The interconnection is subject to subparts 2 and 3.

Subp. 2. Interconnection. The qualifying facility is responsible for complying with all applicable local, state, and federal codes, including building codes, the National Electrical Code (NEC), the National Electrical Safety Code (NESC), and noise and emissions standards. The Cooperative shall require proof that the qualifying facility is in compliance with the NEC before the interconnection is made. The qualifying facility must obtain installation approval from an electrical inspector recognized by the Minnesota State Board of Electricity.

Subp. 3. Generation system. The qualifying facility's generation system and installation must comply with the American National Standards Institute/Institute of Electrical and Electronics Engineers (ANSI/IEEE) standards applicable to the installation.

H. RESPONSIBILITY FOR APPARATUS.

Subpart 1. Member owned facilities. The qualifying facility, without cost to the Cooperative, 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 3.

Subp. 2. Cooperative owned facilities. The Cooperative shall furnish, install, operate, own and maintain in good working order distribution facilities required for the operation of the qualifying facility. The Cooperative retains ownership of any distribution facilities it furnishes including any additions or modifications to the Cooperative's distribution system to accommodate the qualifying facility regardless of any financial contribution to said facilities by member(s).

I. TYPES OF POWER TO BE OFFERED; STANDBY SERVICE.

Subpart 1. Service to be offered. The Cooperative shall offer maintenance, interruptible, supplementary, and backup power to the qualifying facility upon request.

Subp. 2. Standby service. The Cooperative shall offer a qualifying facility standby service at the Cooperative applicable standby rate schedule.

J. DISCONTINUING SALES DURING EMERGENCY.

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

K. RATES FOR COOPERATIVE SALES TO A QUALIFYING FACILITY

Rates for sales to a qualifying facility must be governed by the applicable tariff(s) for the class of electric cooperative member to which the qualifying facility belongs or would belong were it not a qualifying facility. Such rates are not guaranteed and may change from time to time at the discretion of the Cooperative.

L. STANDARD RATES FOR PURCHASES FROM QUALIFYING FACILITIES.

Subpart 1. Qualifying facilities with 100 kilowatt capacity or less. For qualifying facilities with capacity of 100 kilowatts or less, standard purchase rates apply. The Cooperative shall make available four types of standard rates, described in parts M, N, O, and P. 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 V. Any net credit to the qualifying facility must, at its option, be credited to its account with the Cooperative or returned by check or comparably electronic payment service within 15 days of the billing date. The option chosen must be specified in the written contract required in part V. Qualifying facilities remain responsible for any monthly service charges and demand charges specified in the tariff under which they consume electricity from the Cooperative.

Subp. 2. Qualifying facilities over 100 kilowatt capacity. A qualifying facility with more than 100 kilowatt capacity has the option to negotiate a contract with the Cooperative or any other Minnesota utility or, if it commits to provide firm power, be compensated under standard rates.

Subp. 3. Grid Access Charge. A qualifying facility shall be assessed a monthly Grid Access Charge to recover the fixed costs not already paid by the member through the member's existing billing arrangement. The additional charge shall be reasonable and appropriate for the class of member based on the most recent cost of service study defining the Grid Access Charge. The cost of service study for the Grid Access Charge shall be made available for review by the member of the Cooperative upon request.

Subp. 4. Renewable energy credits. The renewable energy credits for the qualifying facility are the property of the qualifying facility owner unless the qualifying facility owner chooses to assign ownership of the renewable energy credit to a different entity.

M. AVERAGE RETAIL COOPERATIVE ENERGY RATE.

Subpart 1. Applicability. The average retail cooperative energy rate is available only to Member-owned 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, a simultaneous purchase and sale basis or roll-over credit basis.

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

Subp. 3. Additional calculations for billing. When the energy generated by the qualifying facility exceeds that supplied by the Cooperative to the Member at the

same site during the same billing period, the Cooperative shall compensate the qualifying facility for the excess energy at the average retail cooperative energy rate.

N. SIMULTANEOUS PURCHASE AND SALE BILLING RATE.

Subpart 1. Applicability. 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 average retail cooperative energy rate basis, time-of-day basis or roll-over credit 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 Cooperative's applicable retail rate schedule.

Subp. 3. Compensation to qualifying facility; energy purchase. The Cooperative shall purchase all energy 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 Cooperative. Compensation to the qualifying facility must be the energy rate shown on schedule 5.

Subp. 4. Compensation to qualifying facility; capacity purchase. If the qualifying facility provides firm power to the Cooperative, the capacity component must be the Cooperative's net annual avoided capacity cost per kilowatt-hour averaged over all hours shown schedule 5, divided by the number of hours in the billing period. If the qualifying facility does not provide firm power to the Cooperative, no capacity component may be included in the compensation paid to the qualifying facility.

O. 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 Cooperative's applicable retail rate schedule.

Subp. 3. Compensation to qualifying facility; energy purchase. The Cooperative shall purchase all energy which is made available to it by the qualifying facility. Compensation to the qualifying facility must be the energy rate shown on schedule 5.

Subp. 4. Compensation to qualifying facility; capacity purchase. If the qualifying facility provides firm power to the Cooperative, the capacity component must be the capacity cost per kilowatt shown on schedule 5 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 Cooperative, no capacity component may be included in the compensation paid to the qualifying facility.

P. ROLL-OVER CREDIT PURCHASE RATES.

Subpart 1. Applicability. The roll-over credit rate is available only to qualifying facilities with capacity of less than 40 kilowatts which choose not to offer electric power for sale on average retail cooperative energy rate basis, time-of-day basis or simultaneous purchase and sale basis.

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

Subp. 3. Additional calculations for billing. When the energy generated by the qualifying facility exceeds that supplied by the Cooperative during a billing period, the Cooperative shall apply the excess kilowatt hours as a credit to the next billing period kilowatt hour usage. Excess kilowatt hours that are not offset in the next billing period shall continue to be rolled over to the next consecutive billing period. Any excess kilowatt hours rolled over that are remaining at the end of each calendar year shall cancel with no additional compensation.

Q. CONTRACTS NEGOTIATED BY MEMBER.

A qualifying facility with capacity greater than 100 kilowatts must negotiate a contract with the Cooperative setting the applicable rates for payments to the Member of avoided capacity and energy costs.

Subpart 1. Amount of Capacity Payments. The qualifying facility which negotiates a contract under Part Q must be entitled to the full avoided capacity costs of the Cooperative. The amount of capacity payments will be determined by the Cooperative and the Cooperative's wholesale power provider.

Subp. 2. Full Avoided Energy Costs. The qualifying facility which negotiates a contract under Part Q must be entitled to the full avoided energy costs of the Cooperative. The costs must be adjusted as appropriate to reflect line losses.

R. WHEELING.

Qualifying facilities with capacity of 30 kilowatts or greater, are interconnected to the Cooperative's distribution system and choose to sell the output of the qualifying facility to any other utility, must pay any appropriate wheeling charges to the Cooperative.

S. NOTIFICATION TO MEMBERS

Subpart 1. Contents of Written Notice. Following each annual review and approval by the Cooperative of the cogeneration rate tariffs the Cooperative shall furnish in the monthly newsletter or through similar notice to each of its members that the Cooperative is obligated to interconnect with and purchase electricity from cogenerators and small power producers.

Subp. 2. Availability of Information. The Cooperative shall make available to all members on the cooperative's website, the interconnection process and requirements adopted by the Cooperative, pertinent rate schedules and sample contractual agreements.

T. DISPUTE RESOLUTION

Subpart 1. Cooperative Dispute Resolution Process. Member(s) should make reasonable efforts to resolve a disputes with Cooperative staff including the Cooperative's General Manager before taking a dispute to the Cooperative's Board of Directors. The Board of Directors shall provide timely opportunity for any member(s) with a dispute to bring the issue(s) to the Board for resolution. The Cooperative Board of Directors shall weigh the issues and circumstances of the case and make a determination on any dispute brought to the Board which must be recorded in the minutes of the meeting. In the event the member(s) and the Cooperative cannot resolve the dispute, either the member(s) or the Cooperative may request mediation as outlined in Subparts 2 and 3.

Subp. 2. Mediator. The Cooperative and the member(s) involved in the dispute must mutually agree upon the selection of a mediator, who must be listed on the roster of neutrals for civil matters established by the state court administrator under Rule 114.12 of the Minnesota's General Rules of Practice for the District Courts.

Subp. 3. Cost Sharing. The Cooperative and the member(s) involved in the dispute shall cost share the expense for a mediator for mediation. The Cooperative shall be responsible for 90% of the mediator's cost and the member(s) who initiated the dispute shall by pay 10% of the cost of the mediator.

U. INTERCONNECTION CONTRACTS

Subpart 1. Interconnection Standards. The Cooperative shall provide the member with a copy of, or electronic link to, the Cooperative's adopted interconnection process and requirements.

Subp. 2 Existing Contracts. Any existing interconnection contract executed between the Cooperative and a qualifying facility with capacity of less than 40 kilowatts remains in force until terminated by mutual agreement of the parties or as otherwise specified in the contract. The Cooperative has assumed all dispute responsibilities as listed in existing interconnection contracts. Disputes are resolved through the process in Section T.

Subp. 3 Renewable Energy Credits; Ownership. Generators own all renewable energy credits unless other ownership is expressly provided for by a contract between a generator and the Cooperative.

V. UNIFORM AGREEMENT.

The form for uniform agreement shall be used between the Cooperative and a qualifying facility having less than 40 kilowatts of capacity is as shown in subpart 1.

Subpart 1. Cooperative Agreement for Cogeneration and Small Power Production Facilities. (see attached uniform contract)

ADOPTED:_____

SIGNED:_____

Chair/President of the Board of Directors of Redwood Electric Cooperative