AGREEMENT FOR ELECTRIC SERVICE FOR QUALIFYING CO-GENERATION AND/OR **SMALL POWER PRODUCTION FACILITIES**

THIS AGREEMENT, made and entered into this _____day of _____,20___, by and between T.I.P. Rural Electric Cooperative, an Iowa cooperative corporation with its principal place of business in Brooklyn, Iowa ("Cooperative") and _____ an individual residing in _____, Iowa

("Member-Consumer");

WITNESSETH:

WHEREAS, Cooperative is a public utility under Chapter 499 of the Code of Iowa (2011) and provides electric utility service at retail to member-consumers in assigned service area; and,

WHEREAS, Member-Consumer is a member of Cooperative and purchases electric power and energy from Cooperative; and,

WHEREAS, Cooperative is a member of Central Iowa Power Cooperative ("CIPCO") and obtains all of its electric power and energy from CIPCO pursuant to the terms and conditions of a wholesale power contract between Cooperative and CIPCO; and,

WHEREAS, Member-Consumer owns and operates a qualifying co-generator or small power production facility ("QF") under the Public Utility Regulatory Policies Act of 1978 ("PURPA"), and desires to purchase from Cooperative/CIPCO emergency and backup electric utility service and to sell excess electric power and energy generated by its QF, and to interconnect with the electric distribution system of Cooperative/CIPCO in order to do so; and,

WHEREAS, the Cooperative/CIPCO and Member-Consumer desire to set forth in this Agreement the terms and conditions pursuant to which said purchases, sales, and interconnection shall be made:

IT IS, THEREFORE, IN CONSIDERATION OF THE MUTUAL CONVENANTS HEREINAFTER SET FORTH. AGREED BY AND BETWEEN THE PARTIES AS FOLLOWS:

A. **Electric Service Provided to Member**

- 1. Cooperative/CIPCO shall furnish, sell and deliver to Member-Consumer, and Member-Consumer shall purchase from Cooperative/CIPCO all of the electric power and energy which Member-Consumer may need at the location.
- 2. Electrical service provided by Cooperative/CIPCO shall be alternating current, single phase, 60 cycles, 120/240 volts or alternating current, multiphase, 60 cycles at 120/208 volts four wire wye or 277/480 volts four wire wye.

- 3. Member-Consumer shall not use the electric power and energy furnished pursuant to this Agreement as an auxiliary or supplement to any other source of electric power and energy, other than that generated by the Member-Consumer's QF located on its premises, and shall not resell electric power and energy purchased hereunder.
- 4. Member-Consumer shall pay Cooperative/CIPCO for service at the rates and upon the terms and conditions set forth in the Cooperative's applicable rate schedule, which schedule is attached hereto and by this reference made a part hereof, for the first six (6) months of the term of this Agreement. Thereafter, Cooperative/CIPCO may establish a qualifying facility backup rate based upon the unique characteristics of the Member-Consumer's load profile, based on an analysis of metered data in a cost of service study, and said backup rate shall apply for the remainder of the term of this Agreement, except as adjusted pursuant to section 7 of this Agreement.
- 5. The initial billing period shall commence when Member-Consumer begins receiving electric power and energy from Cooperative/CIPCO, or thirty (30) days after the date Cooperative/CIPCO notifies Member-Consumer in writing that service is available, whichever shall first occur.
- 6. Bills for service hereunder shall be paid at the office of the Cooperative in Brooklyn, Iowa. Such payment shall be due on the 24th day of each month for service furnished during the preceding monthly billing period. In the event Member-Consumer fails to make payment of any bill when due, Cooperative/CIPCO may discontinue service to Member-Consumer upon twelve (12) days' notice, excluding Saturdays, Sundays, or legal holidays, of its intention to do so. Discontinuance of service shall not relieve Member-Consumer of any of its obligations under this Agreement. Member-Consumer may be given a Credit for sales to Cooperative or the Cooperative's power supplier pursuant to the provisions in section <u>C</u> of this Agreement.
- 7. In the event the rate paid by the Cooperative for the purchase of electric power and energy from its power supplier is modified, or in the event of changes in Cooperative's cost of labor, materials, or other items affecting its costs of operation, Cooperative may change the rate for service provided under this Agreement. In said event, Cooperative shall provide Member-Consumer with ten (10) days' written notice of such rate modification, which modification shall become effective ten (10) days following the giving of said notice.
- 8. Member-Consumer shall become and remain a member of Cooperative during the initial term of this Agreement and any extensions thereof, shall pay the Cooperative's membership fee and shall be subject to the terms and conditions of the Cooperative's Articles of Incorporation, Bylaws, rules, and regulations.

9. The Cooperative/CIPCO shall use reasonable diligence to provide a constant and uninterrupted supply of electric power and energy. If the supply of electric power and energy shall fail or be interrupted, or become defective through act of God, governmental authority, action of elements, public enemy, accident, strikes, labor disputes, required maintenance work, inability to secure right-of-way, or any other cause beyond the reasonable control of the Cooperative/CIPCO, the Cooperative/CIPCO shall not be liable therefore or for damages caused thereby.

B. <u>Interconnection Requirements</u>

The applicant shall submit an application to the Cooperative, using either the Application form attached as Appendix B (Level 1 Application) or the Application form attached as Appendix D (Application form for Levels 2,3, and 4), depending upon the Level of review required.

- 1. All facilities shall meet certain requirements to be eligible for interconnection pursuant to the terms and conditions of this section. Permission to interconnect with the Cooperative/CIPCO electric system is contingent upon the following conditions:
 - a. The Member-Consumer shall comply with acceptable standards for interconnection, safety, and operating reliability. Acceptable standards include the most current revisions of the following, as adopted in the iowa Administrative Code section 199-15.10(1), in order to be eligible for interconnection to the Cooperative/CIPCO electric system:
 - 1. Standards for Interconnecting Distributed Resources with Electric Power Systems, ANSI/IEEE Standard 1547-2003. For guidance in applying IEEE Standard 1547, the Cooperative may refer to:

a: IEEE Recommended Practices and Requirement for Harmonic Control in Electric Power Systems – IEEE Standard 519-1992; and

b: IEC/TR3 61000-3-7 Assessment of emission limits for fluctuating loads in MV and HV power systems.

- 2. Iowa Electrical Safety Code, as defined in 199-Chapter 25.
- 3. National Electrical Code, ANSI/NFPA 70 2008.
- b. The Member-Consumer facility shall automatically and effectively disconnect from the area electric power system upon loss of electric voltage supplied by the Cooperative/CIPCO.
- c. The Member-Consumer shall furnish and install an overcurrent device on the facility to automatically disconnect the facility at all currents that exceed the full-load current rating of the facility. A fuse shall not be used

to satisfy this requirement because its condition and performance cannot be determined through testing without destroying the fuse.

- d. The Member-Consumer shall furnish the Cooperative/CIPCO with sufficient data in order to verify that all conditions in Parts A, B and C above are met. Cooperative/CIPCO approval is required before interconnection is permitted.
- e. The interconnection shall be provided with a switch that provides a visible break or opening. The switch shall be capable of being padlocked in the open position. Both the operator of the qualifying facility (or qualifying alternate energy production facility, or qualifying small hydro facility) and the Cooperative/CIPCO shall have access to the interconnection switch at all times.
- f. Those facilities that produce a terminal voltage prior to the closure of the interconnection shall be provided with synchronism-check devices to prevent closure of the interconnection under conditions other than a reasonable degree of synchronization between the voltages on each side of the interconnection switch.
- g. The Member-Consumer facility shall be subject to disconnection without notice by the Cooperative/CIPCO in the event the facility causes a hazard to the public or to property or unacceptable safety, voltage, voltage wave form, frequency conditions, service interruption, or communications interference.
- h. The Member-Consumer will regularly inspect, maintain, and service the facility for safe and reliable operation and maintain a record or log, available for inspection by the Cooperative or CIPCO, showing when the facility is shut down for repairs or maintenance, the maintenance or repair completed, and when the facility is placed back in service. If requested by the Cooperative or CIPCO, the Member-Consumer shall submit to the Cooperative or CIPCO a maintenance schedule, prior to October 1, of each year, for the following calendar year.
- i. The member-consumer shall agree to indemnify and defend the Cooperative and CIPCO and their representatives against liability for any injuries or damages caused by the operation of the member-consumer's equipment or by any failure of the member-consumer to maintain such equipment in satisfactory or safe operating condition. The memberconsumer will arrange for and maintain liability insurance with limits of not less than those set forth in the attached appendices, with the insurance requirements varying depending upon the size of the interconnecting generator. Failure to maintain required insurance or proof of financial responsibility shall be cause for disconnection. The Cooperative and CIPCO shall be named as additional insureds, to the extent specified in the attached appendices.

- j. The Member-Consumer shall reimburse the Cooperative/CIPCO for costs incurred by the Cooperative/CIPCO for all costs of connection, switching, metering, transmission, distribution, safety provisions and administrative costs incurred by the Cooperative/CIPCO directly related to the installation and maintenance of the physical facilities necessary to permit interconnected operations with a qualifying facility (or qualifying alternate energy production facilities, or qualifying small hydro facilities), to the extent the costs are in excess of the corresponding costs which the Cooperative/CIPCO would have incurred if it had not engaged in interconnected operations, but instead generated an equivalent amount of electric energy itself or purchased an equivalent amount of electric energy or capacity from other sources. Interconnection costs do not include any costs included in the calculation of avoided costs.
- k. The Member-Consumer shall agree to discontinue sales to the Cooperative/CIPCO when, due to operational circumstances, purchases from the Member-Consumer will result in Cooperative/CIPCO costs greater than those which the Cooperative/CIPCO would incur if it did not make such purchases, but instead generated an equivalent amount of energy provided, however, that Cooperative/CIPCO shall notify the Member-Consumer within a reasonable amount of time to allow the Member-Consumer to cease the delivery of energy.
- 1. A contract reflecting the conditions of this tariff shall be required between the Cooperative/CIPCO and the Member-Consumer.
- m. The Member-Consumer shall permit Cooperative or CIPCO representatives to enter upon Member-Consumer's property at any reasonable time for the purpose of inspecting or testing Member-Consumer's equipment, facilities or apparatus and the accuracy of the Cooperative's or CIPCO's metering equipment, but such inspections shall not relieve the Member-Consumer of the obligation to maintain the Member-Consumer's facilities in satisfactory operating conditions. The Cooperative/CIPCO may charge the direct expense of such inspecting or testing of the Member-Consumer's equipment, facilities or apparatus to the Member-Consumer, unless the Member-Consumer can demonstrate the inspecting and testing was not necessary. The member-consumer shall adopt a program of inspection of the generator and its appurtenances and the interconnection equipment in order to determine necessity for replacement and repair.

- n. The member-consumer shall be responsible for the costs of installation and maintenance of any necessary power factor correction capacitors. Member-consumers with a distributed generation facility larger than or equal to 1 MVA shall design their distributed generation facilities to maintain a power factor at the point of interconnection between .95 lagging and .95 leading at all times. Member-consumers with a distributed generation facility smaller than 1 MVA shall design their distributed generation facility to maintain a power factor at the point of interconnection between .90 lagging and .90 leading at all times.
- o. The Member-Consumer's electric generating equipment shall be designed, operated and maintained in such a manner that it does not adversely affect the Cooperative's or CIPCO's system or their service to their other members.
- p. The Cooperative/CIPCO will meter the QF to obtain billing data and to fulfill its recording requirements. Member-Consumer shall pay all costs associated will the installation of metering equipment necessary to measure the sale of power and energy to Member-Consumer. Metering equipment shall be capable of recording kilowatt demand data in thirty (30) minute intervals for the entire billing month. The Cooperative/CIPCO shall have the right to install such additional metering equipment as it deems necessary for the collection of data for research purposes, which metering will be furnished and paid for by the Cooperative/CIPCO. Meters shall be read by the Cooperative/CIPCO.
- q. Cooperative or CIPCO reserves the right to require Member-Consumer to provide at its expense suitable apparatus for filtering to avoid interference with telephone, radio, television, or other electronic signal reception caused by electrical equipment and apparatus on Member-Consumer's premises. Failure of Member-Consumer to provide filtering when requested by the Cooperative or CIPCO shall be grounds for discontinuation of service.
- r. Member-Consumer shall comply with all applicable laws, rules and regulations governing the operation of its QF.
- s. In order to provide adequate safety to Cooperative or CIPCO's employees, Member-Consumer shall furnish and install an Underwriter's Laboratory (UL) listed manual disconnect switch between Member-Consumer's QF and the Cooperative or CIPCO's system in order that the QF may be positively disconnected from Cooperative or CIPCO's system. The location of the switch shall be determined and approved by the Cooperative/CIPCO and shall be housed in an approved enclosure which shall be secured with a padlock or other locking device. Cooperative or CIPCO shall have access to the switch. Cooperative/CIPCO shall have the option of a service transformer disconnect in lieu of the Member-Consumer furnished disconnect switch.

- t. Operation of the QF must not cause any reduction in the quality of service provided to other Member-Consumers or interfere with the operation of the Cooperative or CIPCO's system. Member-Consumer shall take such corrective action as may be necessary in order to eliminate such condition, and shall reimburse the Cooperative or CIPCO for any costs incurred by the Cooperative or CIPCO in correcting or eliminating such conditions.
- u. The electrical characteristics of the QF shall conform with standards established by the Cooperative or CIPCO, including, but not limited to, voltage, current, frequency, harmonics, and automatic synchronization.
- v. Cooperative/CIPCO reserves the right to open the disconnect switch, thereby isolating Member-Consumer's QF, without prior notice to Member-Consumer, for any of the following reasons:
 - 1. System emergency and/or maintenance operations which require such action.
 - 2. The existence of potentially hazard conditions relating to the QF.
 - 3. Interference with the quality of service provided to other Member-Consumers, and/or the operation of the Cooperative's system, caused by or resulting from the operation of the QF.

C. <u>Purchased from Member</u>

- 1. <u>Agreement to Purchase.</u> Cooperative or CIPCO agrees to purchase from Member such excess capacity as may be generated by Member's facility and which Member desires to sell to Cooperative or CIPCO. Cooperative is interconnected with its wholesale power supplier and the purchase obligations of Cooperative may be assumed by Cooperative's wholesale power supplier, CIPCO.
- 2. Rates

QFs with design capacity of 100 kW or less

Payment for purchases from the Member-Consumer pursuant to this contract shall be as follows:

The rate(s) for purchases from qualifying facility (as defined above) and with a design capacity of 100 kilowatts or less are available by contacting the Cooperative. These prices will be consistent with 18 CFR 292.304.

QFs greater than 100 kW

The rate(s) for purchases from qualifying facility (as defined above) and with a design capacity above 100 kilowatts are available on a negotiated case-by-case basis with the Cooperative or CIPCO.

D. <u>Wheeling Charges</u>

Cooperative/CIPCO may provide a wheeling service to a facility interconnected to its electric delivery system. Any charges for the wheeling of power will be determined by the Cooperative/CIPCO and in accordance with any applicable regulations. In addition, Cooperative/CIPCO reserve(s) the right to refuse to wheel power where its existing facilities do not have adequate capacity and the Member-Consumer refuses to pay the costs to upgrade those facilities. If a qualifying alternate energy production or small hydro facility agrees, the Cooperative/CIPCO which would otherwise be obligated to purchase electricity from such facility may transmit the electricity to any other electric utility, or to a separate location owned or occupied by the owners of the facility. Any electric utility to which such electricity is transmitted shall purchase such electric utility. The price for purchase by the electric utility to which such electricity is transmitted shall be adjusted downward according to the mutual agreement of the transmitting and receiving utilities, to reflect any wheeling line losses and shall not include any charges for transmission.

D. <u>Miscellaneous</u>

- 1. This Agreement shall be subject to all federal and state laws and regulations to allocation of power.
- 2. This Agreement shall become effective on the date and year first above written and shall remain in effect for a term of two (2) years from and after the commencement of the initial billing period. This Agreement shall thereafter continue for successive terms of one (1) year each, unless terminated by either party giving the other not less than three (3) months' written notice of its desire to terminate this Agreement.
- 3. This Agreement shall be binding upon the parties, and upon their respective successors and assigns.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on the day and year first above written.

T.I.P. RURAL ELECTRIC COOPERATIVE

By:___

General Manager

MEMBER-CONSUMER

By:_____

Name