

Appendix B – Level 1 standard application form and distributed generation interconnection agreement

LEVEL 1:
STANDARD APPLICATION FORM AND INTERCONNECTION AGREEMENT

Interconnection Request Application Form and
Conditional Agreement to Interconnect
(For Lab-Certified Inverter-Based Distributed Generation Facilities 10 kW or Smaller)

AN APPLICATION FEE OF \$50 MUST BE SUBMITTED WITH THE APPLICATION

Interconnection Applicant Contact Information

Name: _____
Mailing Address: _____
City: _____ State: _____ Zip Code: _____
Telephone (Daytime): _____ (Evening): _____
Facsimile Number: _____ E-Mail Address: _____

Alternate Contact Information (if different from Applicant)

Name: _____
Mailing Address: _____
City: _____ State: _____ Zip Code: _____
Telephone (Daytime): _____ (Evening): _____
Facsimile Number: _____ E-Mail Address: _____

Equipment Contractor

Name: _____
Mailing Address: _____
City: _____ State: _____ Zip Code: _____
Telephone (Daytime): _____ (Evening): _____
Facsimile Number: _____ E-Mail Address: _____
License number (if applicable): _____
Active License? (if applicable) Yes ___ No ___

Electrical Contractor (if Different from Equipment Contractor):

Name: _____
Mailing Address: _____
City: _____ State: _____ Zip Code: _____
Telephone (Daytime): _____ (Evening): _____
Facsimile Number: _____ E-Mail Address: _____
License number: _____
Active License? Yes ___ No ___

Intent of Generation

Please explain the intended use of the generation to be produced by the facility:

- ___ Offset Load (Unit will operate in parallel, but will not export power to Cooperative) (If this option is selected, the Cooperative will not purchase any portion of the generation facility output and Attachment 2 is not applicable)

- ___ Self-Use and Sales to the Cooperative (Unit will operate in parallel and may export and sell excess power to the Cooperative pursuant to the Cooperative's tariff and the terms set forth in Attachment 2)

- ___ Back-up Generation (Units that temporarily operate in parallel with the electric distribution system for more than 100 milliseconds)
(Note: Back-up units that do not operate in parallel for more than 100 milliseconds do not need an interconnection agreement.)(Under this option, the Cooperative will not purchase any portion of the generation facility output and Attachment 2 is not applicable)

- ___ Other: (Please Explain): _____

Distributed Generation Facility ("Facility") Information

Facility Address: _____
City: _____ State: _____ Zip Code: _____
Utility serving Facility site: _____
Account Number of Facility site (existing coop member): _____
Inverter Manufacturer: _____ Model: _____

Is the inverter lab-certified as that term is defined in Iowa Utilities Board Chapter 45 rules on Electric Interconnection of Distributed Generation (199 IAC 45.1)?

Yes ___ No ___

(If yes, attach manufacturer's technical specifications and label information from a nationally recognized testing laboratory.)

Generation Facility Nameplate Rating: _____(kW) _____ (kVA) _____(AC Volts)

Energy Source: Wind ___ Solar ___ Biomass ___ Hydro ___ Diesel ___
Natural Gas ___ Fuel Oil ___ Other: _____

Energy Converter Type: Wind Turbine ___ Photovoltaic Cell ___ Fuel Cell ___
Reciprocating Engine ___ Other: _____

Commissioning Test Date: _____

(If the Commissioning Test Date changes, the interconnection customer must inform the Cooperative as soon as it is aware of the changed date.)

Disconnect Switch: Identify type and location of disconnect switch: _____

Insurance Disclosure

The attached terms and conditions contain provisions related to liability and indemnification and should be carefully considered by the interconnection member-consumer. The interconnection member-consumer shall carry general liability insurance coverage, such as, but not limited to, homeowner's insurance.

Other Facility Information

One-Line Diagram – A basic drawing of an electric circuit in which one or more conductors are represented by a single line and each electrical device and major component of the installation, from the generator to the point of interconnection, are noted by symbols.

One-Line Diagram attached: ___ Yes

Plot Plan – A map showing the distributed generation facility's location in relation to streets, alleys, or other geographic markers.

Plot Plan attached: ___ Yes

Member-Consumer Signature

I hereby certify that: (1) I have read and understand the terms and conditions, which are attached hereto by reference; (2) I hereby agree to comply with the attached terms and conditions; and (3) to the best of my knowledge, all of the information provided in this application request form is complete and true.

Applicant Signature: _____
Title: _____ Date: _____

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This Application Form and Interconnection Agreement is comprised of: 1) the Level 1 Standard Application Form and Interconnection Agreement; 2) the Attachment 1 setting forth the Terms and Conditions for Interconnection; 3) the Attachment 2 setting forth the terms for purchases by the utility from the distributed generation facility, when applicable; and 4) the Certificate of Completion

NOTE: If the Certificate of Completion is not completed and returned to the utility within 12 months following the utility’s dated conditional agreement to interconnect below, this Application Form and Interconnection Agreement will automatically terminate and be of no further force and effect.

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Conditional Agreement to Interconnect Distributed Generation Facility

Receipt of the application fee, if any, is acknowledged and, by its signature below, the utility has determined the interconnection request is complete. Interconnection of the distributed generation facility is conditionally approved contingent upon the attached terms and conditions of this Agreement, the return of the attached Certificate of Completion, duly executed verification of electrical inspection and successful witness test. Note that to the extent the Interconnection Member-Consumer wishes the utility to purchase any output from the interconnected generation facility, a separate power purchase agreement shall be required.

Utility Signature: _____ Date: _____
Name: _____ Title: _____

ATTACHMENT 1

Level 1: Standard Interconnection Agreement

Terms and Conditions for Interconnection

- 1) Construction of the Distributed Generation Facility. The interconnection member-consumer may proceed to construct (including operational testing not to exceed 2 hours) the distributed generation facility, once the conditional Agreement to interconnect a distributed generation facility has been signed by the utility.

- 2) Final Interconnection and Operation. The interconnection member-consumer may operate the distributed generation facility and interconnect with the utility's electric distribution system after all of the following have occurred:
 - a) Electrical Inspection: Upon completing construction, the interconnection member-consumer shall cause the distributed generation facility to be inspected by the local electrical inspection authority who shall establish that the distributed generation facility meets local code requirements.
 - b) Certificate of Completion: The interconnection member-consumer shall provide the utility with a copy of the Certificate of Completion with all relevant and necessary information fully completed by the interconnection member-consumer, as well as an inspection form from the local electrical inspection authority demonstrating that the distributed generation facility passed inspection.
 - c) The Cooperative has completed its witness test as per the following:
 - i) The interconnection member-consumer shall provide the Cooperative at least 15 business days' notice of the planned commissioning test for the distributed generation facility. Within 10 business days after the commissioning test, the Cooperative may, upon reasonable notice and at a mutually convenient time, conduct a witness test of the distributed generation facility to ensure that all equipment has been appropriately installed and operating as designed and in accordance with the requirements of IEEE 1547.
 - ii) If the Cooperative does not perform the witness test within the 10 business days after the commissioning test or such other time as is mutually agreed to by the Parties, the witness test is deemed waived, unless the Cooperative cannot do so for good cause. In these cases, upon utility request, the interconnection member-consumer shall agree to another date for the test within 10 business days after the original scheduled date.

- 3) IEEE 1547. The distributed generation facility shall be installed, operated and tested in accordance with the requirements of The Institute of Electrical and Electronics Engineers, Inc. (IEEE), 3 Park Avenue New York, NY 10016-5997, Standard 1547 (2003) "Standard for Interconnecting Distributed Resources with Electric Power Systems," as well as any applicable federal, state, or local laws, regulations, codes, ordinances, orders, or similar directives of any government or other authority having jurisdiction.
- 4) Access. The Cooperative must have access to the isolation device or disconnect switch and metering equipment of the distributed generation facility at all times. When practical, the Cooperative shall provide notice to the member-consumer prior to using its right of access.
- 5) Metering. Any required metering shall be installed pursuant to the Cooperative's metering rules filed with the Iowa Utilities Board under subrule 199 IAC 20.2(5).
- 6) Disconnection. The Cooperative may disconnect the distributed generation facility upon any of the following conditions, but must reconnect the distributed generation facility once the condition is cured:
 - a) For scheduled outages, provided that the distributed generation facility is treated in the same manner as Cooperative's other member-consumers;
 - b) For unscheduled outages or emergency conditions;
 - c) If the distributed generation facility does not operate in the manner consistent with this Agreement or the applicable requirements of 199 IAC Chapters 15 or the Cooperative's tariff;
 - d) Improper installation or failure to pass the witness test;
 - e) If the distributed generation facility is creating a safety, reliability or a power quality problem;
 - f) The interconnection equipment used by the distributed generation facility is de-listed by the Nationally Recognized Testing Laboratory that provided the listing at the time the interconnection was approved;
 - g) Unauthorized modification of the interconnection facilities or the distributed generation facility; or
 - h) Unauthorized connection to the Cooperative's electric system.
- 7) Indemnification. The interconnection member-consumer shall indemnify and defend the Cooperative and the Cooperative's directors, officers, employees, and agents from all claims, damages and expenses, including reasonable attorney's fees, to the extent resulting from the interconnection member-consumer's negligent installation, operation, modification, maintenance, or removal of its distributed generation facility or interconnection facilities, or the interconnection member-consumer's willful misconduct or breach of this Agreement. The Cooperative shall indemnify and defend the interconnection member-consumer

and the interconnection member-consumer's directors, officers, employees, and agents from all claims, damages, and expenses, including reasonable attorney's fees, to the extent resulting from the Cooperative's negligent installation, operation, modification, maintenance, or removal of its interconnection facilities or electric distribution system, or the Cooperative's willful misconduct or breach of this Agreement.

- 8) Insurance. The interconnection member-consumer shall provide the Cooperative with proof that it has a current homeowner's insurance policy or other general liability policy. The interconnection member-consumer agrees to provide the Cooperative with at least 30 calendar days' advance written notice of cancellation, reduction in limits, or non-renewal of any insurance policy required by this Agreement and may be required to show proof of insurance on an annual basis.
- 9) Limitation of Liability. Each Party's liability to the other Party for any loss, cost, claim, injury, liability, or expense, including reasonable attorney's fees, relating to or arising from any act or omission in its performance of this Agreement, shall be limited to the amount of direct damage actually incurred. In no event shall either Party be liable to the other Party for any indirect, incidental, special, consequential, or punitive damages of any kind whatsoever, provided that in no event shall death, bodily injury or third-party claims be construed as indirect or consequential damages.
- 10) Termination. This Agreement will remain in effect until terminated and may be terminated under the following conditions:
 - a) By interconnection member-consumer - The interconnection member-consumer may terminate this interconnection agreement by providing written notice to the Cooperative. If the interconnection member-consumer ceases operation of the distributed generation facility, the interconnection member-consumer must notify the Cooperative.
 - b) By the Cooperative - The Cooperative may terminate this Agreement without liability to the interconnection member-consumer if the interconnection member-consumer fails to remedy a violation of terms of this Agreement within 30 calendar days after notice, or such other date as may be mutually agreed to in writing prior to the expiration of the 30 calendar day remedy period. The termination date may be no less than 30 calendar days after the interconnection member-consumer receives notice of its violation from the Cooperative.
- 11) Modification of Distributed Generation Facility. The interconnection member-consumer must receive written authorization from the Cooperative before making any changes to the distributed generation facility that could affect the

Cooperative's distribution system. If the interconnection member-consumer makes such modifications without the Cooperative's prior written authorization, the Cooperative shall have the right to disconnect the distributed generation facility.

- 12) Permanent Disconnection. In the event the Agreement is terminated, the Cooperative shall have the right to disconnect its facilities or direct the interconnection member-consumer to disconnect its distributed generation facility.
- 13) Disputes. Each Party agrees to attempt to resolve all disputes regarding the provisions of this Agreement that cannot be resolved between the two Parties pursuant to the dispute resolution provisions found in Iowa Utilities Board Chapter 45 rules on Electric Interconnection of Distributed Generation Facilities (199 IAC 45.12). However, Cooperative's agreement to utilize the dispute resolution provisions of the Chapter 45 rules shall not be construed as an agreement concerning the applicability of the balance of said Chapter.
- 14) Governing Law, Regulatory Authority, and Rules. The validity, interpretation and enforcement of this Agreement and each of its provisions shall be governed by the laws of the State of Iowa. Nothing in this Agreement is intended to affect any other agreement between the Cooperative and the interconnection member-consumer.
- 15) Survival Rights. This Agreement shall remain in effect after termination to the extent necessary to allow or require either Party to fulfill rights or obligations that arose under the Agreement.
- 16) Assignment/Transfer of Ownership of the Distributed Generation Facility. This Agreement shall terminate upon the transfer of ownership of the distributed generation facility to a new owner unless the transferring owner assigns the Agreement to the new owner, the new owner agrees in writing to the terms of this Agreement, and the transferring owner so notifies the Cooperative in writing prior to the transfer of ownership.
- 17) Definitions. Any term used herein and not defined shall have the same meaning as the defined terms used in Iowa Utilities Board Chapter 45 rules on Electric Interconnection of Distributed Generation Facilities (199 IAC 45.1). However, Cooperative's agreement to utilize the definitions found in the Chapter 45 rules shall not be construed as an agreement concerning the applicability of the balance of said Chapter.

- 18) Notice. The Parties may mutually agree to provide notices, demands, comments, or requests by electronic means such as e-mail. Absent agreement to electronic communication, or unless otherwise provided in this Agreement, any written notice, demand, or request required or authorized in connection with this Agreement shall be deemed properly given when receipt is confirmed after notices are delivered in person, delivered by recognized national courier service, or sent by first-class mail, postage prepaid, return receipt requested to the person specified below:

If Notice is to Interconnection Member-Consumer:

Name: _____
Mailing Address: _____
City: _____ State: _____ Zip Code: _____
Telephone (Daytime): _____ (Evening): _____
Facsimile Number: _____ E-Mail Address: _____

If Notice is to Cooperative:

General Manager
Farmers Electric Cooperative, Inc.
P O Box 330
Greenfield, IA 50849
641-743-6146

- 19) Interruptions. The Cooperative is not responsible for any lost opportunity or other costs incurred by the interconnection member-consumer as a result of an interruption of service.
- 20) Operator. The interconnection member-consumer shall designate an operator who will be responsible for day-to-day operations of the distributed generation facility and available for communication on a 24 hour per day/7 day per week basis with the Cooperative, G&T, the Local Balancing Authority, MISO and other applicable entities with jurisdiction over the operation of the Facility and Cooperative's System.

ATTACHMENT 2

Level 1: Standard Interconnection Agreement

Terms of Utility Purchases from Distribution Facility

1. Agreement to Purchase. In the event the Interconnecting Member-Consumer selects the option of Self-Use and Sales to the Cooperative on the Application Form, then the Cooperative agrees to purchase from the Interconnection Member-Consumer such excess energy and capacity as may be available for purchase by the Interconnection Member-Consumer's facility and which Interconnection Member-Consumer desires to sell to Cooperative. Cooperative acknowledges that Interconnection Member-Consumer may utilize some of the energy Interconnection Member-Consumer generates as it is being generated and the Cooperative understands that it will only purchase such excess as Interconnection Member-Consumer delivers to the Cooperative.

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

The price(s) for purchases from a qualifying facility (as defined above) and with a design capacity of 100 kilowatts or less will be the Cooperative's avoided cost. Since the Cooperative purchases all of its electric power requirements from CIPCO (G&T), the Cooperative's avoided cost is similar to that of G&T. Said rate is CIPCO Rate Schedule C. This price will be consistent with 18 CFR 292.304, and may be subject to change as the Cooperative's avoided cost changes.

3. Metering. The Cooperative will install metering equipment at the point of service to the QF Facility of one of the following types:
 - a. Metering capable of measuring and recording energy flows, on a kWh basis, from the Cooperative to the QF and from the QF to the Cooperative, with each directional energy flow recorded independently. Any service over 4 kW fits into this category.
 - b. Metering capable of measuring power flows in each direction on an hourly or other real-time basis.

The Cooperative shall have the opportunity to collect all reasonable costs of metering necessary to allow for sales to the Cooperative from the Member-Consumer.

4. The QF shall be responsible for payment of any applicable facility charge or other applicable charges approved by the Board of Directors that are not collected on the basis of metered registration.

For charges collected on the basis of metered registration, the Cooperative shall, for each monthly billing period, determine the net meter registration of the QF by comparing the directional energy flow in each direction.

If the net meter registration shows that the deliveries of energy in kWh from the QF to the Cooperative exceed the deliveries of energy in kWh from the Cooperative to the QF, the net meter registration in kWh will be carried forward to the next monthly billing period as a Net Metering Credit, expressed in kWh. If the QF has carried over a Net Metering Credit from one or more prior months, the net meter registration from the current month shall be added to the Net Metering Credit that exists from prior months.

If the net metering registration shows that deliveries of energy in kWh from the Cooperative to the QF exceed the deliveries of energy in kWh from the QF to the Cooperative, the QF shall pay the Cooperative for the net amount of energy delivered by the Cooperative after application of any Net Metering Credit carried forward from previous months at the rate applicable to its type or class of electric service.

The Cooperative shall not be required to convert the Net Metering Credit to cash at any time during the year; however, the total Net Metering Credit existing at the end of each year, expressed in kWh, shall be converted to cash by the Cooperative at a rate equal to Cooperative's avoided cost for that year as defined in the PURPA regulations.

5. The net metering (4 kW or less in size) arrangement provided to Member-Consumer herein is for the purposes of promoting small-scale renewable generation facilities, such as the facility owned by Member-Consumer. The parties agree that all kWh's delivered by the QF to the Cooperative shall be deemed to have been purchased by Cooperative at the point of delivery, even though the Cooperative shall have given the Member-Consumer Net Metering Credits rather than a cash payment for the same. In addition, such purchases shall include the purchase of any "green tags," renewable energy credits, or other environmental attributes associated with the purchase of renewable energy.

Appendix C – Standard certificate of completion

CERTIFICATE OF COMPLETION

(To be completed and returned to the Cooperative when installation is complete and final electric inspector approval has been obtained – Use contact information provided on the Cooperative’s web page for generator interconnection to obtain mailing address/fax number/e-mail address)

Interconnection Member-Consumer Information

Name: _____
Mailing Address: _____
City: _____ State: _____ Zip Code: _____
Telephone (Daytime): _____ (Evening): _____
Facsimile Number: _____ E-Mail Address: _____

Installer: _____ Check if owner-installed: ____

Name: _____
Mailing Address: _____
City: _____ State: _____ Zip Code: _____
Telephone (Daytime): _____ (Evening): _____
Facsimile Number: _____ E-Mail Address: _____

Final Electric Inspection and Interconnection Member-Consumer Signature

The distributed generation facility is complete and has been approved by the local electric inspector having jurisdiction. A signed copy of the electric inspector’s form indicating final approval is attached. The interconnection member-consumer acknowledges that it shall not operate the distributed generation facility until receipt of the final acceptance and approval by the Cooperative as provided below.

Signed: _____ Date: _____
(Signature of interconnection member-consumer)

Printed Name: _____

Check if copy of signed electric inspection form is attached: ____
Check if copy of as built documents is attached (projects larger than 10 kVA only): ____

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Acceptance and Final Approval for Interconnection (for Cooperative use only)

The interconnection agreement is approved and the distributed generation facility is approved for interconnected operation upon the signing and return of this Certificate of Completion by the Cooperative:

Electric Distr. Cooperative waives Witness Test? (Initial) Yes (_____) No (_____)

If not waived, date of successful Witness Test: _____ Passed: (Initial) (_____)

Cooperative Signature: _____ Date: _____

Printed Name: _____ Title: _____