



East-Central Iowa Rural Electric Cooperative

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**LEVEL 1
INTERCONNECTION REQUEST APPLICATION FORM AND DISTRIBUTED GENERATION
INTERCONNECTION AGREEMENT**

(For Lab-Certified Inverter-Based Distributed Generation Facilities 100 kVA or less)

INSTRUCTIONS:

1. *Indicates required information.
2. Mail completed form with \$250 application fee to East Central Iowa REC.

INTERCONNECTION MEMBER-CONSUMER CONTACT INFORMATION <i>(Applicant must be owner or lessee of the facility)</i>					
*Owner / Company (Legal Entity Name)			* Contact Name		
* Mailing Address		* City		*State	*Zip
* Phone No. (Daytime)	Phone No. (Evening)	Facsimile No.	* Email Address		
ALTERNATE CONTACT INFORMATION (If different from Member-Consumer Contact Information)					
Owner / Company (Legal Entity Name)			Contact Name		
Mailing Address		City		*State	*Zip
Phone No. (Daytime)	Phone No. (Evening)	Facsimile No.	Email Address		
EQUIPMENT CONTRACTOR					
*Owner / Company Name			* Contact Name		
* Mailing Address		* City		*State	*Zip
* Phone No. (Daytime)	Phone No. (Evening)	Facsimile No.	* Email Address		
ELECTRICAL CONTRACTOR (If different from Equipment Contractor)					
*Owner / Company Name			* Contact Name		
* Mailing Address		* City		*State	*Zip
* Phone No. (Daytime)	Phone No. (Evening)	Facsimile No.	* Email Address		
License No. (If applicable)			Active License? (If applicable)		
			<input type="checkbox"/> Yes <input type="checkbox"/> No		
APPLICANT OWNERSHIP INTEREST (check one)					
<input type="checkbox"/> Owner <input type="checkbox"/> Lease <input type="checkbox"/> 3 rd Party PPA <input type="checkbox"/> Other (Please Explain) _____					

THIRD PARTY INFORMATION

(Only complete this section if the facility is to be located on the premise of someone other than the applicant)

Location of Proposed Facility	Name of Member-Consumer at said location		
* Mailing Address	* City		
* Phone No. (Daytime)	Phone No. (Evening)	*State	*Zip

* INTENT OF GENERATION (check one)

<input type="checkbox"/>	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)
<input type="checkbox"/>	Self-Use and Sales to the Cooperative (Unit will operate in parallel and may export and sell excess power to Cooperative pursuant to the Cooperative's tariff and the terms set forth in Attachment 2)
<input type="checkbox"/>	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)
<input type="checkbox"/>	Sale of generation output to member-consumer upon whose premise the facility is located and export and sell any excess power to the Cooperative, which sales may require a separate point of interconnection, metering, and power purchase agreement.
<input type="checkbox"/>	Other: (Please Explain):

DISTRIBUTED GENERATION FACILITY INFORMATION

* Facility Address or Latitude and Longitude	* City	*State	*Zip
* Cooperative Serving Facility Site	Account No. of Facility Site <i>(existing member-consumers)</i>	*Meter No. <i>(existing member-consumers)</i>	
<input type="checkbox"/> Yes <input type="checkbox"/> No	* 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)? (If yes, attach manufacturer's technical specifications and label information from a nationally recognized testing laboratory, e.g., UL.)		
* Generation Facility Nameplate Rating (AC): _____ (kW) _____ (kVA) _____ (AC Volts)			
* Energy Source <input type="checkbox"/> Wind <input type="checkbox"/> Solar <input type="checkbox"/> Biomass <input type="checkbox"/> Hydro <input type="checkbox"/> Diesel <input type="checkbox"/> Natural Gas <input type="checkbox"/> Fuel Oil <input type="checkbox"/> Other _____			
If Solar: Number of Inverters _____ Number of Panels _____ Tilt (degrees) _____ Azimuth (180° is South facing) _____ Array Type: <input type="checkbox"/> Fixed <input type="checkbox"/> Single Axis <input type="checkbox"/> Dual Axis			
* Energy Converter Type <input type="checkbox"/> Wind Turbine <input type="checkbox"/> Photovoltaic Cell <input type="checkbox"/> Fuel Cell <input type="checkbox"/> Reciprocating Engine <input type="checkbox"/> Other _____			
Commissioning Test Date: _____ <i>(If the Commissioning Test Date changes, the interconnection member-consumer must inform the Cooperative as soon as it is aware of the changed date.)</i>			
Disconnection Device: Identify type and location of disconnection device:			
Is the generation facility a qualifying facility as defined under Public Utilities Regulatory Policy Act (18 CFR Part 292, Subpart B)? <input type="checkbox"/> Yes <input type="checkbox"/> No			

*INFORMATION FOR INVERTER-BASED FACILITIES

Inverter Information

*Manufacturer	*Model		
* Type <input type="checkbox"/> Forced Commutated <input type="checkbox"/> Line Commutated	*Rated Output _____ Watts _____ Volts		
* Efficiency	*Power Factor	*Inverter UL1741 Listed <input type="checkbox"/> Yes <input type="checkbox"/> No	

DC Source/Prime Mover			
Rating (kW)	Rating (kVA)	Rated Voltage	Open Circuit Voltage <i>(if applicable)</i>
Rated Current (Amps)		Short Circuit Current (Amps) <i>(if applicable)</i>	

*INSURANCE DISCLOSURE
<p>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. The interconnection customer shall provide the utility with proof that it has a current homeowner's insurance policy or other general liability policy.</p> <p>Proof of Insurance attached: <input type="checkbox"/> Yes</p>

*OTHER FACILITY INFORMATION
<p>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.</p> <p>One-Line Diagram attached: <input type="checkbox"/> Yes</p> <p>Plot Plan - A map or sketch showing the distributed generation facility's location in relation to streets, alleys, or other geographic markers (i.e. section pin, corner pin, buildings, permanent structures, etc.).</p> <p>Plot Plan attached: <input type="checkbox"/> Yes</p>

*MEMBER-CONSUMER SIGNATURE
<p>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.</p>
<p>Applicant Signature <i>(signature must reflect Contact Name under section Interconnection Applicant Contact Information)</i> Date:</p>
<p>Printed Name: Title:</p>
<p>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 Cooperative from the distributed generation facility, when applicable; and 4) the Certificate of Completion, which shall be completed and returned to the utility when installation is complete and final electric inspector approval has been obtained.</p> <p>NOTE: If the Certificate of Completion is not completed and returned to the Cooperative within 12 months following the Cooperative's dated conditional agreement to interconnect below, this Application Form and Interconnection Agreement will automatically terminate and be of no further force and effect.</p>

FOR COOPERATIVE USE ONLY	
Date Received:	Project ID:

*CONDITIONAL AGREEMENT TO INTERCONNECT DISTRIBUTED GENERATION FACILITY
<p>Receipt of the application fee, if any, is acknowledged and, by its signature below, the Cooperative 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 Cooperative to purchase any output from the interconnected generation facility, a separate power purchase agreement shall be required.</p>
<p>Cooperative Representative's Signature Date</p>
<p>Printed Name: Title:</p>

ATTACHMENT 1
Level 1: Distributed Generation 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 Cooperative.
2. Final Interconnection and Operation. The interconnection member-consumer may operate the distributed generation facility and interconnect with the Cooperative'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 Cooperative 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 Cooperative request, the interconnection member-consumer shall agree to another date for the test within 10 business days after the original scheduled date.
 - d. Executed Certificate of Completion: The utility has signed, executed and transmitted to the interconnection member-consumer the Certificate of Completion provided by the interconnection member-consumer in 2 b.
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 disconnection device 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. Inspections and testing. The operator of the distributed generation facility shall adopt a program of inspection and testing of the generator and its appurtenances and the interconnection facilities in order to determine necessity for replacement and repair. Such a program shall include all periodic tests and maintenance prescribed by the manufacturer. If the periodic testing of interconnection-related protective functions is not specified by the manufacturer, periodic testing shall occur at least once every five years. All interconnection-related protective functions shall be periodically tested, and a system that depends upon a battery for trip power shall be checked and logged. The operator shall maintain test reports and shall make them available upon request by the electric Cooperative. Representatives of the Cooperative shall have access at all reasonable hours to the interconnection equipment specified in 199 IAC 45.3(2) for inspection and testing with reasonable prior notice to the applicant.
6. 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).
7. 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 load 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.
8. 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.
 9. 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.
 10. 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.
 11. 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.
 12. 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.
 13. 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.
 14. 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) and/or dispute resolution provisions adopted by the Cooperative. 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.
 15. 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.
 16. 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.
 17. 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.
 18. 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.

19. 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:

- a. If Notice is to Interconnection Member-Consumer: Use the contact information provided in the interconnection member-consumer’s application. The interconnection member-consumer is responsible for notifying the Cooperative of any change in the contact party information, including change of ownership.
- b. If Notice is to Cooperative: Use the contact information provided below. The Cooperative is responsible for notifying the interconnection member-consumer of any change in the contact party information.

East Central Iowa REC CONTACT INFORMATION			
Name			
* Mailing Address	* City	*State	*Zip
* Phone No. <i>(Daytime)</i>	Phone No. <i>(Evening)</i>	Facsimile No.	* Email Address

20. 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.

21. 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 Cooperative, G&T, the Local Balancing Authority, Midcontinent Independent System Operator (MISO), Southwest Power Pool (SPP), and other applicable entities with jurisdiction over the operation of the Facility and Cooperative's System.

22. Notification. When the distributed generation facility is placed in service, owners of interconnected distributed generation facilities are required to notify local fire departments via U.S. mail of the location of distributed generation facilities and the associated disconnection device(s). The owner is required to provide any information related to the distributed generation facility as reasonably required by that local fire department including but not limited to:

- a. A site map showing property address; service point from Cooperative; distributed generation facility and disconnect location(s); location of rapid shutdown and battery disconnect(s), if applicable; property owner’s or owner’s representative’s emergency contact information; Cooperative’s emergency telephone number; and size of the distributed generation facility.
- b. Information to access the disconnection device.
- c. A statement from the owner verifying that the distributed generation facility was installed in accordance with the current state-adopted National Electrical Code

ATTACHMENT 2
Level 1: Standard Interconnection Agreement

Terms of Cooperative Purchases from Distribution Facility

1. Agreement to Purchase. In the event the Interconnecting Member-Consumers selects the option of Self-Use and Sales to the Cooperative on the Application Form or sale of generation output to member-consumer upon whose premise the facility is located, 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 Cooperative.

2. Rates

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 will be the Cooperative's avoided cost. Since the Cooperative purchases all of its electric power requirements from Central Iowa Power Cooperative (G&T), the Cooperative's avoided cost is similar to that of G&T. This rate 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.
- 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 service 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.

After July 23, 2014, only facilities under 5kW are eligible for Net Metering. The availability of this optional rate is subject to a total facility cap of 250kW of nameplate capacity on the Cooperative's system. (The total facility cap of 250kW has been met as of 10-30-2014)

East Central Iowa REC will not offer a discounted rate on an interconnected account, for example an electric heat rate. Should a member wish to install an AEP facility, and currently has a discounted rate being billed, the member will need to convert their discounted service to their main meter to have an approved AEP facility connected.

5. Applicable to Net Metered Accounts Only

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.

6. The net metering 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.