ECI REC
East-Central Iowa Rural Electric Cooperative
2400 Bing Miller Lane | PO Box 248 | Urbana, IA 52345-0248

Online Form Instructions

- For the purpose of ECI REC online forms, when the word “signature” appears, a typed, legal name is an acceptable substitute. As long as the complete, legal name appears in each blank for which a signature was requested, the form is accurate and binding (pending accurate completion of all other form sections). It is not necessary to print and sign the form if users plan on taking advantage of the “submit by email” option provided on the final page of each form.

- Some rebates may require the actual signature of mechanical engineers. ECI REC will follow-up with members applying for those rebates as necessary.

- Please do not fill out the “office only” sections of the form. Tab past them when filling out the form.

- Completed forms and required sales receipts or invoices may also be submitted to ECI REC via fax at (319) 443-4359. Please submit both the completed form and accompanying invoice(s) using the same method—fax or email—to ensure they arrive together at ECI REC.

- Fill-able PDF forms work in most all web browsers, *except* Firefox. Suggested web browsers to use when completing the forms are: Internet Explorer, Chrome, Safari, Android, etc.

ECI REC
A Touchstone Energy® Cooperative

East-Central Iowa Rural Electric Cooperative
2400 Bing Miller Lane | PO Box 248 | Urbana, IA 52345-0248
Ph: 877-850-4343 | F: 319-443-4359 | ecirec@ecirec.coop
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LEVELS 2 - 4
INTERCONNECTION REQUEST APPLICATION FORM

(For Distributed Generation Facilities 10 MVA or less)

INSTRUCTIONS:

1. ***Indicates required information.**
2. Mail completed form with application fee (see page 2) to East Central Iowa REC.

INTERCONNECTION MEMBER-CONSUMER CONTACT INFORMATION
(Applicant must be owner or lessee of the facility)

*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

FACILITY LOCATION *(If different from information above)*

* Facility Address or Latitude and Longitude	* City	*State	*Zip
* Cooperative serving Facility Site	Account Number of Facility Site *(existing member-consumers)*	Meter No. (existing member-consumers)	

EQUIPMENT CONTRACTOR

* 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)* ☐ Yes ☐ No	

APPLICANT OWNERSHIP INTEREST *(check one)*

☐ Owner ☐ Lease ☐ 3rd Party PPA ☐ 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 Customer at said location		
* Mailing Address	* City		
* Phone No. *(Daytime)*	Phone No. *(Evening)*	*State	*Zip

ELECTRIC SERVICE INFORMATION FOR MEMBER-CONSUMER FACILITY WHERE GENERATOR WILL BE INTERCONNECTED

*Capacity (Service Entrance): _____ (Amps)	Voltage: _____ (Volts)	* Type of Service ☐ Single Phase ☐ Three-Phase	
* If three-phase transformer, indicate type: *Primary* Winding: ☐ Wye ☐ Delta *Secondary* Winding: ☐ Wye ☐ Delta		* Transformer Size	*Impedance

* INTENT OF GENERATION *(check one)*

☐	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 Cooperative pursuant to the Cooperative's tariff and a separate power purchase agreement to be executed by the parties)
☐	Wholesale Market Transaction (Unit will operate in parallel and participate in MISO, SPP, or other wholesale power markets pursuant to separate requirements and agreements with MISO, SPP, or other transmission providers, and applicable rules of the Federal Energy Regulatory Commission)
☐	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.)
☐	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.
☐	Other: (Please Explain):

*GENERATOR AND PRIME MOVER INFORMATION

Energy Source

☐ Wind ☐ Solar ☐ Process Byproduct ☐ Biomass ☐ Hydro ☐ Oil ☐ Natural Gas ☐ Coal ☐ Other_____

If Solar: Number of Inverters_____ Number of Panels_____ Tilt (degrees) _____ Azimuth (180° is South facing) _____

Array Type: ☐ Fixed ☐ Single Axis ☐ Dual Axis

Energy Converter Type

☐ Wind Turbine ☐ Photovoltaic Cell ☐ Fuel Cell ☐ Reciprocating Engine ☐ Other_____

Generator #1 Size: _____ (kW) _____ (kVA)	Generator #1 Nameplate Rating (AC): _____ (kW)	Generator #2 Size: _____ (kW) _____ (kVA)	Generator #2 Nameplate Rating (AC): _____ (kW)
Generator #3 Size: _____ (kW) _____ (kVA)	Generator #3 Nameplate Rating (AC): _____ (kW)	Total Number of Units: _____	Total Capacity of All Generators: _____ (kW) _____ (kVA)

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)?

☐ Yes ☐ No

* REQUESTED PROCEDURE UNDER WHICH TO EVALUATE INTERCONNECTION REQUEST *(check one)*

Please indicate below which review procedure applies to the interconnection request. The review procedure used is subject to confirmation by the Cooperative.

☐	Level 2 – Lab-certified interconnection equipment with an aggregate electric nameplate capacity less than or equal to 150 kVA. Lab-certified is defined in Iowa Utilities Board Chapter 45 rules on Electric Interconnection of Distributed Generation Facilities (199 IAC 45.1). (Application fee is $375 plus $1.00 per kVA.
☐	Level 3 – Distributed generation facility does not export power. Nameplate capacity rating is less than or equal to 50 kVA if connecting to area network or less than 150 kVA if connecting to a radial distribution feeder. (Application fee amount is $500 plus $2.00 per kVA.)
☐	Level 4 – Nameplate capacity rating is less than or equal to 10 MVA and the distributed generation facility does not qualify for a Level 1, Level 2, or Level 3 review, or the distributed generation facility has been reviewed but not approved under a Level 1, Level 2, or Level 3 review. (Application fee amount is $1,000 plus $2.00 per kVA, to be applied toward any subsequent studies related to this application.)

Note: Descriptions for interconnection review categories do not list all criteria that must be satisfied. For a complete list of criteria, please refer to Section 29.5 of the Cooperative's tariff.

DISTRIBUTED GENERATION FACILITY INFORMATION

Commissioning Test Date: _____ *(If the Commissioning Test Date changes, the interconnection member-consumer must inform the Cooperative as soon as it is aware of the changed date. Notice must be at least 15 business days prior to the test date.)*

List interconnection components/systems to be used in the distributed generation facility that are lab-certified.

*Component/System	NRTL Providing Label and Listing

Please provide copies of the manufacturer brochures or technical specifications.

*ENERGY PRODUCTION EQUIPMENT/INVERTER INFORMATION

☐ Induction ☐ Inverter ☐ Synchronous ☐ Other_____

Rating	Rating	*Rated Voltage	* Rated Current
_____ (kW)	_____ (kVA)	_____ Volts	_____ Amps

* System Type Tested? (Total System): ☐ Yes ☐ No *(attach product literature)*

*FOR SYNCHRONOUS MACHINES

Note: Contact Cooperative to determine if all the information requested in this section is required for the proposed distributed generation facility.

Manufacturer:

* Model No:	* Version No.	Submit Copies of the Saturation Curve and Vee Curve ☐ Salient ☐ Non-Salient

Torque (lb-ft)	Rated RPM	Field Amperes _____ at rated generator voltage and current and _____ % PF over-excited

Type of Exciter	Output Power of Exciter	Type of voltage regulator

Locked Rotor Current (Amps)	Synchronous Speed (RPM)	Winding Connection	Minimum Operating Frequency/Time

Generator Connection

_____ Delta _____ Wye _____Wye Grounded

Direct-axis Synchronous Reactance (Xd)	Direct-axis Transient Reactance (X'd)	Direct-axis Sub-Transient Reactance (X'd)
_____ (ohms)	_____ (ohms)	_____ (ohms)
Negative Sequence Reactance	**Zero Sequence Reactance**	**Natural Impedance or Grounding Resister (if any)**
_____ (ohms)	_____(ohms)	_____ (ohms)

*FOR INDUCTION MACHINES

Note: Contact Cooperative to determine if all the information requested in this section is required for the proposed distributed generation facility.

Manufacturer:	Model No.
* Version No.	Locked Rotor Current (Amps)

Rotor Resistance (Rr)	Exciting Current	Rotor Resistance (Xr)	Reactive Power Required
_____ (ohms)	_____(Amps)	_____(ohms)	_____
Magnetizing Reactance (Xm)	**VARS *(No Load)***	**Stator Resistance (Rs)**	**VARS *(Full load)***
_____ (ohms)	_____	_____ (ohms)	_____

Stator Reactance (Xs)	Short Circuit Reactance (Xd)	Phases
_____ (ohms)	_____ (ohms)	☐ Single Phase ☐ Three-Phase

Frame Size	Design Letter	Temp Rise (°C)

REVERSE POWER RELAY INFORMATION (LEVEL 3 REVIEW ONLY)

Manufacturer:	Model No.

Relay Type:	Reverse Power Setting	Reverse Power Time Delay *(if any)*

*FOR INVERTER-BASED MACHINES

Inverter Information

Manufacturer:	Model No.

Type	Rated Output
☐ Forced Commutated ☐ Line Commutated	_____ Watts _____ Volts

Efficiency (%)	Power Factor (%)	Inverter UL 1741 Listed
		☐ Yes ☐ No

DC Source/Prime Mover

Rating	Rating	Rated Voltage	Open Circuit Voltage *(if applicable)*
_____ (kW)	_____ (kVA)	_____ Volts	_____ Volts

Rated Current (Amps)	Short Circuit Current *(if applicable)* (Amps)

*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 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.).

Plot Plan attached: ☐ Yes

*MEMBER-CONSUMER SIGNATURE

I hereby certify that all of the information provided in this Interconnection Request Application Form is true.

Applicant Signature *(signature must reflect Contact Name under section Interconnection Applicant Contact Information)*	Date:
Printed Name:	Title:

An application fee is required before the application can be processed. Please verify that the appropriate fee is included with the application (see page 2):	Amount $_____

FOR COOPERATIVE USE ONLY	
Date Received:	Project ID:

*COOPERATIVE ACKNOWLEDGEMENT	
Receipt of the application fee is acknowledged and this interconnection request is complete.	
Cooperative Representative's Signature	Date
Printed Name:	Title: