Eastern Illini
Electric
Cooperative

Application for Operation of Member-Owned Generation

Complete and return this application to the Cooperative's renewable energy group as part of an Interconnection Request.

PART 1
OWNER/APPLICANT INFORMATION

Member Name: _____

Account Number (if known): _____

Mailing Address: _____

City: _____ County: _____ State: _____ Zip Code: _____

Phone Number: _____ Representative: _____

Email Address: _____ Fax Number: _____

PROJECT DESIGN/ENGINEERING (ARCHITECT) (as applicable)

Company: _____

License/Registration Number and State: _____

Mailing Address: _____

City: _____ County: _____ State: _____ Zip Code: _____

Phone Number: _____ Representative: _____

Email Address: _____ Fax Number: _____

ELECTRICAL CONTRACTOR (as applicable)

Company: _____

License/Registration Number and State: _____

Mailing Address: _____

City: _____ County: _____ State: _____ Zip Code: _____

Phone Number: _____ Representative: _____

Email Address: _____ Fax Number: _____

TYPE OF GENERATOR (as applicable)

Photovoltaic _____ Wind _____ Micro Turbine _____

Diesel Engine _____ Gas Engine _____ Combustion Turbine _____

Other _____

RENEWABLE ENERGY PROGRAM

Net Billing   Waived QF   Standard QF

ESTIMATED LOAD, GENERATOR RATING AND MODE OF OPERATION INFORMATION

The following information is necessary to help properly design the Cooperative Member interconnection. This information is not intended as a commitment or contract for billing purposes.

Total Site Load_____(kW)

Residential_____   Commercial_____   Industrial_____

Generator Rating_____(kW)   Annual Estimated Generation_____(kWh)

DESCRIPTION OF PROPOSED INSTALLATION AND OPERATION

Provide a description of the proposed installation, including a detailed description of its planned location, the point of electrical interconnection, structure(s) to be served by the generator, and the date you plan to commence operation of the generator.

_____

_____

_____

_____

_____

_____

_____

_____

END OF PART 1
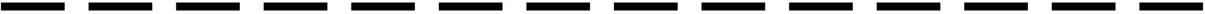
PART 2

(Complete all applicable items. Copy this page as required for additional generators)

SOLAR or WIND System Data (if applicable)

SOLAR PANEL Manufacturer/Model/Quantity:_____ DC wattage_____

WIND TURBINE Manufacturer/Model/ Quantity:_____ Wattage_____

INVERTER: Manufacturer/Model/AC wattage_____

MICRO INVERTER: Manufacturer/Model_____ Quantity_____

OPTIMIZER: Manufacturer/Model_____ Quantity_____

TOTAL MAX KW: DC_____ AC_____

Rated Power Factor (%):_____ Rated Voltage (Volts):_____ Rated Amperes: _____

Inverter Type (ferroresonant, step, pulse-width modulation, etc): _____

Type commutation:_____forced_____line

Harmonic Distortion: Maximum Single Harmonic (%) _____

Maximum Total Harmonic (%) _____

Note: Attach all available calculations, test reports, and oscillographic prints showing inverter output voltage and current waveforms.

SYNCHRONOUS GENERATOR DATA (if applicable)

Unit Number:_____ Total number of units with listed specifications on site: _____

Manufacturer:_____

Type:_____ Date of Manufacture: _____

Serial Number (each):_____

Phases:_____Single _____Three _____R.P.M.:_____ Frequency (Hz): _____

Rated Output (for one unit): _____Kilowatt_____Kilovolt-Ampere

Rated Power Factor (%):_____ Rated Voltage (Volts):_____ Rated Amperes: _____

Field Volts:_____ Field Amps:_____ Motoring power (kW): _____

Synchronous Reactance (Xd):_____% on_____KVA base

Transient Reactance (Xd):_____% on_____KVA base

Subtransient Reactance (Xd);_____% on_____KVA base

Negative Sequence Reactance (Xs):_____% on_____KVA base

Zero Sequence Reactance (Xo):_____% on_____KVA base

Neutral Grounding Resistor (if applicable): _____

_____

$I_2{}^2t$ or K (heating time constant): _____

Additional information:_____

INDUCTION GENERATOR DATA (Complete all applicable items)

Rotor Resistance (Rr):_____ohms   Stator Resistance (Rs):_____ohms

Rotor Reactance (Xr):_____ohms   Stator Reactance (Xs):_____ohms

Magnetizing Reactance (Xm):_____ohms   Short Circuit Reactance (Xd):_____ohms

Design letter: _____   Frame Size: _____

Exciting Current: _____   Temp Rise (deg C°): _____

Reactive Power Required:_____Vars (no load),_____Vars (full load)

Additional information: _____

PRIME MOVER (Complete all applicable items.)

Unit Number:_____ Type:_____

Manufacturer:_____

Serial Number:_____ Date of manufacture: _____

H.P. Rated:_____ H.P. Max.:_____ Inertia Constant:_____lb.-ft.^{2}

Energy Source (hydro, steam, wind, etc.) _____

GENERATOR TRANSFORMER (Complete all applicable items.)

TRANSFORMER (between generator and utility system)

Generator unit number:_____Date of Manufacturer: _____

Manufacturer:_____

Serial Number: _____

High Voltage:_____KV, Connection: delta   wye, Neutral solidly grounded? _____

Low Voltage:_____KV, Connection: delta   wye, Neutral solidly g rounded? _____

Transformer Impedance(Z):_____% on_____KVA base.

Transformer Resistance (R):_____% on_____KVA base.

Transformer Reactance (X):_____% on_____KVA base.

Neutral Grounding Resistor (if applicable): _____

POWER CIRCUIT BREAKER (if applicable)

Manufacturer:_____Model:_____

Rated Voltage (*kilovolts*):_____Rated Ampacity *(Amperes)*_____

Interrupting rating (Amperes):_____BIL rating: _____

Interrupting medium / insulating medium (ex. Vacuum, gas, oil)_____/_____

Control Voltage (Closing):_____(Volts)   AC   DC

Control Voltage (Tripping):_____(Volts) AC DC Battery Charged Capacitor Close

energy: Spring Motor_____Hydraulic Pneumatic Other: _____

Trip energy: Spring Motor_____Hydraulic Pneumatic Other: _____

Bushing Current Transformers:_____(Max. ratio) Relay Accuracy Class: _____

Multi ratio? _____No _____Yes: (Available taps) _____

ADDITIONAL INFORMATION

In addition to the items listed above, please attach a detailed one-line diagram of the proposed facility, all applicable elementary diagrams, major equipment, (generators, transformers, inverters, circuit breakers, protective relays, etc.) specifications, test reports, etc., and any other applicable drawings or documents necessary for the proper design of the interconnection. Also describe the project's planned operating mode (e.g., combined heat and power, peak shaving, etc.), and its address or grid coordinates.

END OF PART 2

SIGNATURE AND ACKNOWLEDGMENT

For myself and/or with authority/permission of the entity named herein, I state the following:

I have read, understand and agree to all provisions, terms and conditions set forth in Eastern Illini Electric Cooperative Regulation No 27 - Interconnection and Parallel Operation of Distributed Generation.

I desire to interconnect electric generating equipment to the low-voltage premises wiring at the applicable premises or facility. I desire to undertake Parallel Operation of such generating equipment with the electric system of the Cooperative as defined in Regulation No 27.

I agree the Cooperative will evaluate and analyze the impact the proposed electric generation equipment may have on (i) the operations of Cooperative electric system and (ii) the quality of electric service provided to the Member of the Cooperative. The Cooperative has identified the fee associated with this application, which includes the costs of basic design evaluation to be $500.00.

I understand the basic design evaluation may reveal the requirement for a detailed design evaluation, may require an upgrade to Cooperative infrastructure in order to maintain an adequate quality of electrical service to any and all Cooperative members, or may impact a third-party utility in such a manner that such utility requires further studies and/or upgrades. I understand that to proceed with the interconnection application process and prior to interconnection, I am responsible for such additional fees and/or costs, pursuant to Regulation No 27.

I understand that the $500 application fee is non-refundable, regardless of the basic design application results, or if I decide to discontinue with the interconnection.

I agree not to undertake Parallel Operation of any generating equipment on the low-voltage premises wiring at my property without the "Authorization to Energize" executed by the Cooperative. I further agree to allow the Cooperative to share pertinent interconnection information with the contracted installer of such renewable energy system.

_____
Applicant – Member, Print Name

_____   _____
Applicant – Member, Signature   Date

Please email this application, along with the following information to: renewables@eiec.coop.

* One-line diagram   EIEC

* Proof of insurance   RENEWABLES TEAM

* Spec sheet for solar panels   330 W OTTAWA

* Spec sheet for inverter(s)   PAXTON, IL 60957

Please call us at 800-824-5102 if you have any questions about the application process.

QUEUE DATE: _____ at TIME: _____ BY:_____