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/Owner 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 _____

APPLICABLE 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/Owner 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
Rotor Reactance (Xr):_____ohms
Magnetizing Reactance (Xm):_____ohms
Design letter: _____
Exciting Current: _____
Stator Resistance (Rs):_____ohms
Stator Reactance (Xs):_____ohms
Short Circuit Reactance (Xd):_____ohms
Frame Size: _____
Temp Rise (deg C^o): _____

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/Owner 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 member/owners, 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-Owner, Print Name

_____ _____
Applicant/Member-Owner Signature Date

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

* One-line diagram
* Proof of insurance
* Spec sheet for solar panels
* Spec sheet for inverter(s)

EIEC
RENEWABLES TEAM
330 W OTTAWA
PAXTON, IL 60957

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

QUEUE DATE: _____ at TIME: _____ BY: _____