



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 _____

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^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 grounded? _____

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
