

**GENERATION INTERCONNECTION REQUEST  
(Application Form)**

**For generation greater than 40 kW connecting to 100 kV and below**

Transmission Owner: Southern Illinois Power Cooperative (SIPC)  
Designated Contact Person: Attn: Power Delivery Department  
Address: 11543 Lake of Egypt Rd.  
Marion, IL 62959  
Telephone Number: (618) 964-1448

An Interconnection Request is considered complete when it provides all applicable and correct information required below as well as the processing fee discussed below.

**Preamble and Instructions**

An Interconnection Customer who requests an interconnection must submit this Interconnection Request by hand delivery, mail or e-mail to the Transmission Owner.

**Processing Fee or Deposit**

The Interconnection Customer shall submit to the Transmission Owner a non-refundable deposit of either Five Thousand Dollars (\$5,000) for sites less than or equal to 5 MW or Twenty Thousand Dollars (\$20,000) for sites greater than 5 MW but smaller than 50 MW towards the cost of required studies and equipment. All application processing fees will be applied to the total interconnection cost if an Interconnection Agreement is fully executed.

**Interconnection Customer Information**

Legal Name of the Interconnection Customer (or, if an individual, individual's name)

Name: \_\_\_\_\_

Contact Person: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Facility Location (if different from above): \_\_\_\_\_

Telephone (Primary): \_\_\_\_\_ Telephone (Alternate): \_\_\_\_\_

Fax: \_\_\_\_\_ E-Mail Address: \_\_\_\_\_

Alternative Contact Information (if different from the Interconnection Customer)

Contact Name: \_\_\_\_\_

Title: \_\_\_\_\_

Address: \_\_\_\_\_

Telephone (Primary): \_\_\_\_\_ Telephone (Alternate): \_\_\_\_\_

Fax: \_\_\_\_\_ E-Mail Address: \_\_\_\_\_

Application is for:    \_\_\_\_\_ New Generating Facility (40 – 5,000 kW)  
                          \_\_\_\_\_ Capacity addition to Existing Generating Facility  
                          \_\_\_\_\_ New Generating Facility (> 5,000 kW)

If capacity addition to existing facility, please describe (including a description of the existing net capability):

\_\_\_\_\_  
\_\_\_\_\_

Will the Generating Facility be used for any of the following?

MISO Market Participant? Yes \_\_\_ No \_\_\_

To Supply Power to the Interconnection Customer? Yes \_\_\_ No \_\_\_

To Supply Power to Others? Yes \_\_\_ No \_\_\_

Requested Point of Interconnection (GPS Coordinates):

\_\_\_\_\_  
\_\_\_\_\_

Interconnection Customer's Requested In-Service Date: \_\_\_\_\_

For installations at locations with existing electric service to which the proposed Generating Facility will interconnect, provide:

\_\_\_\_\_ (Local Electric Service Provider\*)    \_\_\_\_\_ (Existing Account Number\*)

[\*To be provided by the Interconnection Customer if the local electric service provider is different from the Transmission Owner]

Contact Name: \_\_\_\_\_

Title: \_\_\_\_\_

Address: \_\_\_\_\_

Telephone (Primary): \_\_\_\_\_ Telephone (Alternate): \_\_\_\_\_

Fax: \_\_\_\_\_ E-Mail Address: \_\_\_\_\_

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**Generating Facility Information**

Type of Generator: \_\_\_\_ Inverter \_\_\_\_ Synchronous \_\_\_\_ Induction

Generator Nameplate AC Rating: \_\_\_\_\_ kW

Generator Nameplate kVAR: \_\_\_\_\_ (leading/lagging)

Interconnection Customer or Customer-Site Load: \_\_\_\_\_ kW (if none, so state)

Typical Reactive Load (if known): \_\_\_\_\_

Maximum Physical Export Capability Requested: \_\_\_\_\_ kW

Total Number of Generators to be interconnected pursuant to this Interconnection

Request: Single phase \_\_\_\_ Three phase \_\_\_\_

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**Generating Facility Characteristic Data (for inverter-based machines)**

Type: (Solar, Wind, Storage, Hydro, Biomass, etc.):

Inverter manufacturer and model: \_\_\_\_\_

AC and DC Nameplate Rating kW: \_\_\_\_\_

Max design fault contribution current: \_\_\_\_\_ Instantaneous \_\_\_\_\_ or RMS \_\_\_\_\_

Harmonics Contribution: \_\_\_\_\_

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**Generating Facility Characteristic Data (for rotating machines)**

Generator Manufacturer, Model Name & Number: \_\_\_\_\_

RPM Frequency: \_\_\_\_\_

(\*) Neutral Grounding Resistor (If Applicable): \_\_\_\_\_

Synchronous Generators:

Direct Axis Synchronous Reactance,  $X_d$ : \_\_\_\_\_ P.U.

Direct Axis Transient Reactance,  $X'_d$ : \_\_\_\_\_ P.U.

Direct Axis Subtransient Reactance,  $X''_d$ : \_\_\_\_\_ P.U.

Negative Sequence Reactance,  $X_2$ : \_\_\_\_\_ P.U.

Zero Sequence Reactance,  $X_0$ : \_\_\_\_\_ P.U.

KVA Base: \_\_\_\_\_

Field Volts: \_\_\_\_\_

Field Amperes: \_\_\_\_\_

Induction Generators:

Motoring Power (kW): \_\_\_\_\_

$I_2^2$  t or K (Heating Time Constant): \_\_\_\_\_

Rotor Resistance, Rr: \_\_\_\_\_

Stator Resistance, Rs: \_\_\_\_\_

Stator Reactance, Xs: \_\_\_\_\_

Rotor Reactance, Xr: \_\_\_\_\_

Magnetizing Reactance, Xm: \_\_\_\_\_

Short Circuit Reactance, Xd": \_\_\_\_\_

Exciting Current: \_\_\_\_\_

Temperature Rise: \_\_\_\_\_

Frame Size: \_\_\_\_\_

Design Letter: \_\_\_\_\_

Reactive Power Required In Vars (No Load): \_\_\_\_\_

Reactive Power Required In Vars (Full Load): \_\_\_\_\_

Total Rotating Inertia, H: \_\_\_\_\_ Per Unit on kVA Base

Note: Please contact the Transmission Owner prior to submitting the Interconnection Request to determine if the specified information above is required.

**Excitation and Governor System Data for Synchronous Generators Only**

Provide appropriate IEEE model block diagram of excitation system, governor system and power system stabilizer (PSS) in accordance with the regional reliability council criteria. A PSS may be determined to be required by applicable studies. A copy of the manufacturer's block diagram may not be substituted.

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**Interconnection Facilities Information**

Will a transformer be used between the generator and the point of common coupling?  
\_\_\_ Yes \_\_\_ No

Will the transformer be provided by the Interconnection Customer? \_\_\_ Yes \_\_\_ No

Transformer Data (If Applicable, for Interconnection Customer-Owned Transformer):

Is the transformer: \_\_\_ Single phase \_\_\_ Three phase Size: \_\_\_\_\_ kVA

Transformer Impedance: \_\_\_\_\_ % on \_\_\_\_\_ kVA Base

If Three Phase:

Transformer Primary: \_\_\_\_\_ Volts \_\_\_ Delta \_\_\_ Wye \_\_\_ Wye Grounded

Transformer Secondary: \_\_\_\_\_ Volts \_\_\_ Delta \_\_\_ Wye \_\_\_ Wye Grounded

Transformer Tertiary: \_\_\_\_\_ Volts \_\_\_ Delta \_\_\_ Wye \_\_\_ Wye Grounded

Transformer Fuse Data (If Applicable, for Interconnection Customer-Owned Fuse):

Manufacturer: \_\_\_\_\_ Type: \_\_\_\_\_ Size: \_\_\_\_\_ Speed: \_\_\_\_\_

Interconnecting Circuit Breaker (if applicable):

Manufacturer: \_\_\_\_\_ Type: \_\_\_\_\_  
Load Rating (Amps): \_\_\_\_\_ Interrupting Rating (Amps): \_\_\_\_\_  
Trip Speed (Cycles): \_\_\_\_\_

Interconnection Protective Relays (If Applicable):

If Microprocessor-Controlled:

List of Functions and Adjustable Setpoints for the protective equipment or software:

Setpoint Function	Minimum	Maximum
1. _____	_____	_____
2. _____	_____	_____

If Discrete Components:

(Enclose Copy of any Proposed Time-Overcurrent Coordination Curves)

Manufacturer: \_\_\_\_\_ Type: \_\_\_\_\_ Style/Catalog No.: \_\_\_\_\_ Proposed Setting: \_\_\_\_\_  
Manufacturer: \_\_\_\_\_ Type: \_\_\_\_\_ Style/Catalog No.: \_\_\_\_\_ Proposed Setting: \_\_\_\_\_

Current Transformer Data (If Applicable):

Manufacturer: \_\_\_\_\_ Type: \_\_\_\_\_ Accuracy Class: \_\_\_\_\_  
Proposed Ratio Connection: \_\_\_\_\_

Potential Transformer Data (If Applicable):

Manufacturer: \_\_\_\_\_ Type: \_\_\_\_\_ Accuracy Class: \_\_\_\_\_  
Proposed Ratio Connection: \_\_\_\_\_

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**General Information to include with application:**

One-Line Diagram	___ Yes ___ No
Site Plan with .KMZ if available	___ Yes ___ No
System Protection and Control Scheme Documentation	___ Yes ___ No
Relay, Alarm, Control Schematics	___ Yes ___ No
Completed Power Systems Load Flow data sheet	___ Yes ___ No
List of adjustable set points for protective equipment or software	___ Yes ___ No
Transformer Fuse Manufacturer's TCC Curves	___ Yes ___ No
CT Manufacturer's Excitation and Ratio Correction Curves	___ Yes ___ No

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**Applicant Signature**

I hereby certify that, to the best of my knowledge, all the information provided in this Interconnection Request is true and correct.

Interconnection Customer: \_\_\_\_\_ Date: \_\_\_\_\_