

Checklist of Items to complete for a Distributed Generation Installation under Ameren Illinois Company's Net Metering or Qualifying Facility Policies

If connecting to the Ameren Illinois system under the Net Metering tariff:

- Print and complete the [Net Metering Application](#). Mail your application to:

Ameren Illinois Distributed Energy Resources
6 Executive Dr – Mail Code 925
Collinsville, IL 62234

- Fill out all applicable blanks on the form. If you have any questions about the requested information, please contact the Ameren Illinois Company Distributed Energy Resources at RenewablesIllinois@ameren.com for assistance.

1. Enter the ten digit account number from your Ameren Illinois Company electric bill
2. Elect an Annual Period Anniversary Month on the Net Metering Application.
 - a. Solar photovoltaic installations, April is typically selected.
 - b. Wind turbine installations, October is typically selected.

If connecting to the Ameren Illinois system under the Qualifying Facilities tariff:

- Print and complete the [Qualifying Facilities](#) Application Form. Mail your application to:

Ameren Illinois Distributed Energy Resources
6 Executive Dr – Mail Code 925
Collinsville, IL 62234

- Fill out all applicable blanks on the form. If you have any questions about the requested information, please contact the Ameren Illinois Company Distributed Energy Resources at RenewablesIllinois@ameren.com for assistance.

All interconnections require a Distributed Generation Interconnection Application.

<http://www.ameren.com/sites/aiu/ElectricChoice/Pages/DistributedGeneration.aspx>

- Inverter Technical Specifications (if applicable) – When submitting the Distributed Generation Interconnection Application, include a copy of the technical specifications, label or "cut sheet" identifying the inverter manufacturer and model number and certification by a nationally recognized testing laboratory as being UL1741 / IEEE1547 compliant.

References	Description
IEEE 1547-2003 & IEEE 1547a	SMART Inverters connected to the Company's system shall be rated as IEEE 1547 compliant with the allowance of smart capabilities extended by IEEE 1547a, and when applicable shall comply with the upcoming IEEE 1547 full revision and with final conformance test procedures contained in IEEE standard 1547.1, which is not expected to be published until Q3 or Q4 of 2019.
UL 1741	SMART inverters connected to the Company's system shall be rated as UL 1741 safety compliant
UL 1741 SA	SMART Inverters connected to the Company's system shall pass UL 1741 SA ¹ as Grid Support Utility Interactive Inverter
California Rule 21	SMART Inverters connected to the Company's system shall be compliant with California Rule 21 Phase 1 functions (Section Hh. of the Rule 21)

- Picture of the Illinois Volt-Var Set points properly configured on the inverter display
- Verification of Communications Requirements:
 - Protocol Requirements: If not included on the Inverter Spec Sheet, include documentation from the manufacturer or appropriate certifying organization that the inverter installed supports one of the three protocols defined on page 3
 - Transport Layer Requirements: If not included on the Inverter Spec Sheet, include documentation from the manufacturer that the inverter installed supports the TCP/IP transport/network layer functionality
 - Physical Layer Requirements: If not included on the Inverter Spec Sheet, include a picture of the Ethernet or RS 485 Serial Port on the installed Inverter

Protocol	Transport	Physical Interface/Layer
IEEE 1815 (DNP3)/ SunSpec Modbus/ IEEE 2030.5 (Sep 2.0)	TCP/IP	Ethernet/ RS 485

- One-Line Diagram – Prefer to have one-line diagram with every installation, but only required with a Level 2, 3 or 4 applications.

If Level 2, 3 or 4, then the Standard Distributed Generation Interconnection Agreement is also needed. Ameren Illinois personnel will provide document.

Phone line (cell or hard line) required for all installations 1 MW and above

Requirements:

- AC Safety Disconnect - there are certain requirements for this disconnect

Customer's lockable AC generation source disconnect switch shall comply with the following:

- a. One of the following types
 1. Manual operable switch or circuit breaker
 2. Load-break-rated pull-out-switch
 - b. Simultaneously disconnect all ungrounded conductors of the circuit
 - c. Located outdoors where readily accessible
 - d. Enclosures with doors or hinged covers that are readily accessible to unqualified persons and have exposed live parts when the enclosure is opened must be secured in a manner that requires a tool to open the enclosure or must be lockable.
 - e. Disconnect mechanism must be padlockable in the open (OFF) position.
 - f. Plainly indicate whether in the open (OFF) or closed (ON) position
 - g. Have ratings sufficient for the maximum circuit current, available fault current, and voltage that is available at the terminals
 - h. Be marked with a warning when the line and load terminals are capable of being energized in the open position.
 - i. The lockable AC generation source disconnect switch must be within reach, with a maximum mounting height with the handle no higher than 6'7" above grade when in the "UP" or ON position.
 - j. When the lockable AC generation source disconnect is a knife-blade safety switch (fused or non-fused), the conductors coming from the DER system must terminate on the bottom lugs of this disconnect. Utility supply will terminate on the top lugs of this disconnect.
 - k. When the lockable AC generation source disconnect is a Circuit Breaker, the utility supply shall terminate at the ON side lugs of the breaker. The conductors coming from the DER system shall terminate at the OFF side lugs of the breaker.
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- Meter Socket – Per the Ameren Service Manual sect 200.01.A.8, any work or wiring changes at the service will prompt the need to upgrade to the latest service requirements, including but not limited to having a lever bypass socket.
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- Signage – plaque must be either attached to the AC Generation Source Safety Disconnect or located next to the disconnect.
 1. If the plaque cannot, for some reason, be attached directly to the AC Generation Source Safety Disconnect, you MUST discuss possible alternative locations with the Ameren Illinois DER Coordinator or another Ameren Illinois representative.
 2. The plaque must be two-ply or three-ply, non-conductive, plastic engraved plates that are weatherproof and UV resistant.
 3. The plaque must be attached to its location with permanent adhesive.
 4. The plaque must be a minimum of 5" x 7" in size.

5. Wording for the plaque at the disconnect must say, "CAUTION: MULTIPLE SOURCES OF POWER – Lockable AC Generation Source Disconnect". If the disconnect is within 10' and within sight of the meter, only that 1 sign at the disconnect is required.

If the Lockable AC Generation Source Safety Disconnect is located more than 10' away from your meter or is not visible while standing at the meter, even if it is within 10', you must have permission by the Ameren Illinois DER Coordinator or another Ameren Illinois representative and a second sign would be required at the meter. That signage must say, "CAUTION: MULTIPLE SOURCES OF POWER – Lockable AC Generation Source Disconnect Available for Isolation from Utility" and additional verbiage to explain the exact location of the disconnect. Other requirements for the plaque(s) remain the same as outlined above.

- Proof of liability insurance – insurance coverage of the structure to which the distributed generation installation is attached (Ameren Illinois is not listed as a beneficiary)

1. The proof of insurance requested is a Homeowner's Declaration, typically a one or two page document available on request from your homeowner's insurance agent.

2. Some agencies can print them from their office; others must be requested by the agent from the home office of the insurer.

- Certificate of Completion - Once your installation is complete and inspected by any municipal, county or other governmental authority-claiming jurisdiction over the installation; you must complete a Certificate of Completion and return it to your Ameren Illinois Company representative along with a copy of any inspection documentation provided by the inspecting authority. If your installation is not in a jurisdiction requiring inspection, you must still complete and return the Certificate of Completion to Ameren Illinois.

<https://www.ameren.com/-/media/illinois-site/Files/ElectricChoice/CertificateofCompletion.pdf>

- Distributed Generation Installer Certification – An Installer Certification is required by every customer installing parallel generation
- Illinois Distributed Energy Rebate Application
- For all Non-Residential customers installing parallel generation, please print and complete a W-9 form. <https://www.irs.gov/pub/irs-pdf/fw9.pdf>