

Non-Parallel Generation Application

Use for:

Connection of Electric Generation between the Ameren Illinois Utilities' (AIU) Distribution System and a Generator that will operate with an:

Open Transition (Category 1)

or

Synchronized Closed Transition (Category 2)

Please mail the completed application to:

AIU Business and Solutions Center
Attn: Customer Generation Team
300 Liberty Street
Peoria, IL 61602

Customer Information

Name: _____

Mailing Address: _____

City: _____ State: _____ Zip Code: _____

Service/Street Address (if different from above): _____

City: _____ State: _____ Zip Code: _____

Daytime Phone: _____ Evening Phone: _____

Fax: _____ E-Mail: _____

Company Account No. (from Utility Bill): _____

Installation Information/Hardware and Installation Compliance

Person or Company Installing: _____

Contractor's License No. (if applicable): _____

Approximate Installation Date: _____

Mailing Address: _____

City: _____ State: _____ Zip Code: _____

Daytime Phone: _____ Evening Phone: _____

Fax: _____ E-Mail: _____

Person or Agency Who Will Inspect/Certify Installation: _____

Customer's Generator & Transfer Switch System Information

Manufacturer Nameplate AC Power Rating: _____ kW and Voltage: _____ V.

System Type: (describe) _____

Service/Street Address: _____

Transfer Switch Equipment Manufacturer: _____

Transfer Switch Equipment Model No.: _____

Are System Plans & Specifications Attached? Yes____ No ____

Existing Electrical Service Capacity: _____ Amperes Voltage: _____ Volts

Service Character: Single Phase ____ Three Phase ____

Location of Lockable Visible Open/Main Disconnect Device (describe):

_____

Type of Connection

Customer is proposing to connect generation that falls under the following category:

____ Category 1 – Open Transition

____ Category 2 – Synchronized Closed Transition of Less than 0.1 Seconds

Signature

I hereby certify that, to the best of my knowledge, all the information provided on this Generator Connection Request Form is true and correct. After the installation and testing of the generator and upon proper submission or resubmission of the documentation required by Ameren, I agree to operate the generator in compliance with the attached Terms and Conditions.

Customer Signature: _____ Date: _____

Printed Name: _____

Terms and Conditions for Connection

1) All UL, NEC and building code requirements shall be followed.

2) A "visible disconnect" between the Ameren system and the generator is required for the safety and protection of Ameren personnel. The visible open disconnect device shall be accessible to Ameren personnel at all times.

3.1) An open transition between the Ameren system and customer generator(s) can be achieved with an integral transfer switch with mechanical interlocking provisions; a pair of Kirk key-interlocked disconnect switches or circuit breakers; or a pair of circuit breakers with electrical interlocking provisions, provided that the interlocking scheme is backed up with hard-wired protection directly from the breaker auxiliary contacts.

3.1.1) If the open transition between sources is being achieved via automatic transfer means, then the following shall apply:

- Voltage-sensing capability or other means for detecting the loss and recovery of the Ameren source shall be required.

- A manual "bypass" (i.e. auto disable) feature is not required, but it is highly recommended.

3.2) A closed transition between sources can be achieved with an Integral automatic transfer switch set, solid blade disconnects or circuit breakers, then the following shall apply:

3.2.1) The duration of synchronized closed transition between the sources should be less than 100 milliseconds during startup and shutdown of the unit.

3.2.2) Synchronizing capability shall be required in order to safely tie the sources together.

3.2.3) A provision for a transfer failure scheme; which will cause the opening of one of the sources within two (2.0) seconds of the start of the paralleling condition.

3.2.4) An undervoltage protection provision shall be required which prevents a closed transition transfer in the event that the Ameren source is not present.

3.2.5) A manual "bypass" (i.e. auto disable) feature is not required, but it is highly recommended.

3.3) Ameren defines a programmable logic controller (PLC) as any solid-state microprocessor-based controller that needs to be programmed by the user with the logic necessary for it to supervise and execute the control functions for which it is being utilized. If a PLC is used the following shall apply:

3.3.1) A backup control scheme independent of the PLC shall be provided to prevent the extended paralleling operation.

3.3.2) The PLC and backup control logic shall be enabled when the transfer scheme is placed in automatic operation and disabled when the transfer scheme is placed in manual operation.

3.3.3) The automatic transfer switch shall be "supervised" by the status of the disconnect switch, circuit breaker or bypass switch controls so that if any of these switches is manually tripped, the PLC control will disable automatic transfer.

3.3.4) The PLC shall not lose power at any time as a direct result of automatic transfer switching operations.

4) Ameren does not require that the transfer equipment be capable of switching or disconnecting the grounded circuit conductor (neutral).

5) Signage shall be provided in the immediate vicinity of Ameren's revenue meter indicating that; "Backup Generation Present – Lockable Main Service Disconnect Available for Isolation". Similarly, provide signage at the disconnect device itself; "Lockable Main Service Disconnect for Isolation from Generator". The sign shall have minimum dimensions of 5"x 7", be permanently secured with bolts, and shall be both waterproof and ultraviolet resistant.

6) Generator owner/operator must agree not to operate the generator in parallel with Ameren's electric system other than as indicated in this agreement.

7) A one-line diagram is required showing the electrical location of the Ameren source as well as that of the generator, the transfer switch, and if applicable, the visible open disconnect device inside the customer facility. Attached are a few examples of customer equipment placement.

8) A start-up and commissioning test procedure is required. Ameren and the customer shall agree on this procedure as well as on the date and time of the testing. Ameren personnel will attend (if desired by Ameren) and take any operational or safety precautions deemed necessary.

Examples of placement of customer equipment





