



McLouth Office
507 N. Union
McLouth, KS 66054

Topeka Office
1100 SW Auburn Rd.
Topeka, KS 66615

1-800-794-1989
www.freestate.coop

Application for Interconnecting an Inverter-Based Small Generating Facility No Larger than 10kW*

This Application is considered complete when it provides all applicable and correct information required below. Additional information to evaluate the Application may be required.

Application Submission and Processing Fee

Non-refundable application and processing fee of \$325 and written applications shall be submitted in person or by mail/email to:

FreeState Electric Cooperative
Energy Use Coordinator
P.O. Box 70
McLouth, KS 66054-0070
Email: customerservice@freestate.coop

Interconnection Customer

Member Name: _____ Account No. _____
Contact Name: _____
Mailing Address: _____
Street or PO Box City State Zip

Email Phone

Sales Agency (who sold you the system)

Company Name: _____ Contact Name: _____
Mailing Address: _____
Street or PO Box City State Zip

Email Phone

Electrical Contractor

Contractor Name: _____ Contact Name: _____
Mailing Address: _____
Street or PO Box City State Zip

Email Phone

Generator/Inverter System Vendor Information

Purchased From: _____
Mailing Address: _____
Street or PO Box City State Zip

Email Phone



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Generation Billing Type

Please select the type of billing that you are requesting. Information on the different types of billing is available by request. Note: Net metering is the most common form of billing used for small generating facilities.

Net Metering

Parallel Generation

Parallel Generation-Renewable

Small Generating Facility Technical Information

Facility Location: _____
Street or PO Box City State Zip

_____ Email

_____ Phone

Inverter 1 Data

Microinverter(s) YES NO If yes, total number of microinverters? _____

Manufacturer: _____

Model: _____

Nominal Output Voltage: _____ (AC Volts)

Output Power Factor: _____

Peak AC Output Power: _____ (Watts)

Total Harmonic Distortion: _____ (%)

Continuous AC Output Power: _____ (Watts)

Single Phase Three Phase

Inverter 2 Data Information is the same as inverter 1

Manufacturer: _____

Model: _____

Nominal Output Voltage: _____ (AC Volts)

Output Power Factor: _____

Peak AC Output Power: _____ (Watts)

Total Harmonic Distortion: _____ (%)

Continuous AC Output Power: _____ (Watts)

Single Phase Three Phase

Inverter 3 Data Information is the same as inverter 1 Information is the same as inverter 2

Manufacturer: _____

Model: _____

Nominal Output Voltage: _____ (AC Volts)

Output Power Factor: _____

Peak AC Output Power: _____ (Watts)

Total Harmonic Distortion: _____ (%)

Continuous AC Output Power: _____ (Watts)

Single Phase Three Phase

Total of All System Inverters _____ (kW) AC



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Generator Data

Manufacturer: _____ Model: _____

Total System DC Power Output _____ (kW)

Prime Mover:

Photovoltaic

Number of Panels _____

Power DC Output of 1 panel: _____ (Watts)

Reciprocating Engine

Fuel Cell

Turbine

Other _____

Energy Source:

Solar

Wind

Hydro

Diesel

Natural Gas

Other _____

Battery Data (if applicable)

Manufacturer: _____

Model: _____

Continuous Output Power: _____ (kW)

Battery Capacity: _____ (kWh)

AC DC

Estimated Installation Date: _____

Estimated In-Service Date: _____

This Application is only for inverter-based Small Generating Facilities no larger than 10 kW* that meet the codes, standards, and certification requirements of Attachments three and four of the Federal Energy Regulatory Commission (FERC) Small Generator Interconnection Procedures (SGIP), or the Cooperative has reviewed the design or tested the proposed Small Generating Facility and is satisfied that it is safe to operate.

Attachments three and four have been included for reference at the end of this Application.



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Is this equipment UL listed? Yes No

List components of the Small Generating Facility equipment package that are currently certified:

Equipment Type (Generator, Inverter etc.) Certification (UL1741, IEEE1547, etc)

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Spec Sheets of the Generating Facility Attached (REQUIRED)

One-Line Diagram of the Generating Facility Attached (REQUIRED)

Interconnection Customer Signature

I hereby certify that, to the best of my knowledge, the information provided in this Application is true. I agree to abide by the Terms and Conditions for Interconnecting an Inverter-Based Small Generating Facility No Larger than 10kW*.

Printed Name: _____

Signature: _____ Date: _____

Applications shall be submitted in person or by mail/email to:

FreeState Electric Cooperative | Energy Use Coordinator | P.O. Box 70 | McLouth, KS 66054-0070 | Email: customerservice@freestate.coop

**Facility applications between 10 and 15 kW may be subject to additional engineering review or additional fees.*

FreeState Use Only - Do Not Mark In Shaded Area

Contingent Approval to Interconnect the Small Generating Facility

Interconnection of the Small Generating Facility is approved contingent upon the Terms and Conditions for Interconnecting an Inverter-Based Small Generating Facility No Larger than 10kW* and return of the Certificate of Completion.

Cooperative Representative Signature _____

Title: _____ Date: _____

Cooperative waives inspection/
witness test?

Yes No



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Supplemental Information

From FERC Small Generator Interconnection Procedures

Attachment 3 - Certification Codes and Standards

IEEE1547 Standard for Interconnecting Distributed Resources with Electric Power Systems (including use of IEEE 1547.1 testing protocols to establish conformity)

UL 1741 Inverters, Converters, and Controllers for Use in Independent Power Systems

IEEE Std 929-2000 IEEE Recommended Practice for Utility Interface of Photovoltaic (PV) Systems

NFPA 70 (2002), National Electrical Code

IEEE Std C37.90.1-1989 (R1994), IEEE Standard Surge Withstand Capability (SWC) Tests for Protective Relays and Relay Systems

IEEE Std C37.90.2 (1995), IEEE Standard Withstand Capability of Relay Systems to Radiated Electromagnetic Interference from Transceivers

IEEE Std C37.108-1989 (R2002), IEEE Guide for the Protection of Network Transformers

IEEE Std C57.12.44-2000, IEEE Standard Requirements for Secondary Network Protectors

IEEE Std C62.41.2-2002, IEEE Recommended Practice on Characterization of Surges in Low Voltage (1000V and Less) AC Power Circuits

IEEE Std C62.45-1992 (R2002), IEEE Recommended Practice on Surge Testing for Equipment Connected to Low-Voltage (1000V and Less) AC Power Circuits

ANSI C84.1-1995 Electric Power Systems and Equipment – Voltage Ratings (60 Hertz)

IEEE Std 100-2000, IEEE Standard Dictionary of Electrical and Electronic Terms

NEMA MG 1-1998, Motors and Small Resources, Revision 3

IEEE Std 519-1992, IEEE Recommended Practices and Requirements for Harmonic Control in Electrical Power Systems

NEMA MG 1-2003 (Rev 2004), Motors and Generators, Revision 1

Supplemental Information

From FERC Small Generator Interconnection Procedures

Attachment 4 - Certification of Small Generator Equipment Packages

1.0 Small Generating Facility equipment proposed for use separately or packaged with other equipment in an interconnection system shall be considered certified for interconnected operation if (1) it has been tested in accordance with industry standards for continuous utility interactive operation in compliance with the appropriate codes and standards referenced below by any Nationally Recognized Testing Laboratory (NRTL) recognized by the United States Occupational Safety and Health Administration to test and certify interconnection equipment pursuant to the relevant codes and standards listed in SGIP Attachment 3, (2) it has been labeled and is publicly listed by such NRTL at the time of the interconnection application, and (3) such NRTL makes readily available for verification all test standards and procedures it utilized in performing such equipment certification, and, with consumer approval, the test data itself. The NRTL may make such information available on its website and by encouraging such information to be included in the manufacturer's literature accompanying the equipment.

2.0 The Interconnection Customer must verify that the intended use of the equipment falls within the use or uses for which the equipment was tested, labeled, and listed by the NRTL.

3.0 Certified equipment shall not require further type-test review, testing, or additional equipment to meet the requirements of this interconnection procedure; however, nothing herein shall preclude the need for an on-site commissioning test by the parties to the interconnection nor follow-up production testing by the NRTL.

4.0 If the certified equipment package includes only interface components (switchgear, inverters, or other interface devices), then an Interconnection Customer must show that the generator or other electric source being utilized with the equipment package is compatible with the equipment package and is consistent with the testing and listing specified for this type of interconnection equipment.

5.0 Provided the generator or electric source, when combined with the equipment package, is within the range of capabilities for which it was tested by the NRTL, and does not violate the interface components' labeling and listing performed by the NRTL, no further design review, testing or additional equipment on the customer side of the point of common coupling shall be required to meet the requirements of this interconnection procedure.

6.0 An equipment package does not include equipment provided by the utility.

7.0 Any equipment package approved and listed in a state by that state's regulatory body for interconnected operation in that state prior to the effective date of these small generator interconnection procedures shall be considered certified under these procedures for use in that state.

