



Certificate of Completion and Interconnection Agreement

For Small Generating Facilities under 25 kW

www.pvrea.coop
1-800-432-1012

Applicant Information

Name: _____ PVREA account #: _____

Address of installation: _____

City: _____ State: _____ Zip: _____

Email Address: _____ Phone: _____

Equipment Installer

Name: _____

Address: _____

City: _____ State: _____ Zip: _____

Contact: _____ Contact phone: _____

Email: _____

The Applicant / Interconnection Customer hereby certifies that the Small Generation Facilities described above were installed on _____ in accordance with the requirements in Poudre Valley Rural Electric Association Inc.'s [PVREA] Interconnection Procedures and Guidelines, and the Applicant / Interconnection Customer agrees with PVREA to the provisions of the Agreement in Attachment 1 and Attachment 2. The Applicant / Interconnection Customer further certifies that the Small Generation Facilities are ready for PVREA's (at its discretion) on-site inspection and witness testing and the Applicant / Interconnection Customer certifies that all inspections by local authorities have been completed. The "Parties" to the Agreement are the Applicant / Interconnection Customer and PVREA.

Applicant / Interconnection Customer's signature and date

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Approval to Energize the Small Generating Facility (For PVREA use only)

Energizing the Small Generating Facility is approved contingent upon the Terms and Conditions for Interconnecting an Inverter-Based Small Generating Facility No Larger than 25 kW.

PVREA signature: _____

Title: _____ Date: _____



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Attachment 1: Terms and Conditions for Interconnecting an Inverter-Based Small Generating Facility No Larger than 25 kW

1. Construction of the Facility

The Interconnection Customer may proceed to construct (including operational testing not to exceed two hours) the Small Generating Facility when PVREA approves the Interconnection Request (the "Application") and returns it to the Interconnection Customer.

2. Interconnection and Operation

The Interconnection Customer may operate Small Generating Facility and interconnect with PVREA's electric system once all of the following have occurred:

- 2.1. Upon completing construction, the Interconnection Customer will cause the Small Generating Facility to be inspected or otherwise certified by the appropriate local electrical wiring inspector with jurisdiction;
- 2.2. The Interconnection Customer returns the Certificate of Completion to PVREA;
- 2.3. PVREA has completed its inspection of the Small Generating Facility to ensure that all equipment has been appropriately installed and that all electrical connections have been made in accordance with applicable codes. All inspections must be conducted by PVREA, at its own expense, within ten Business Days after receipt of the Certificate of Completion and shall take place at a time agreeable to the Parties. PVREA shall provide a written statement that the Small Generating Facility has passed inspection or shall notify the Interconnection Customer of what steps it must take to pass inspection as soon as practicable after the inspection takes place.
- 2.4. PVREA has the right to disconnect the Small Generating Facility in the event of improper installation or failure to return the Certificate of Completion.

3. Safe Operations and Maintenance

The Interconnection Customer shall be fully responsible to operate, maintain, and repair the Small Generating Facility as required to ensure that it complies at all times with the interconnection standards to which it has been certified at the Interconnection Customer's expense.

4. Access

PVREA shall have unrestricted access to the disconnect switch (if the disconnect switch is required) and metering equipment of the Small Generating Facility at all times. PVREA shall provide reasonable notice to the Interconnection Customer when possible prior to using its right of access.

5. Disconnection

PVREA may temporarily disconnect the Small Generating Facility upon the following conditions:

- 5.1. For scheduled outages upon reasonable notice.
- 5.2. For unscheduled outages or emergency conditions.
- 5.3. If the Small Generating Facility does not operate in the manner consistent with these Terms and Conditions.
- 5.4. PVREA shall inform the Interconnection Customer in advance of any scheduled disconnection, or as is reasonable after an unscheduled disconnection.

6. Indemnification

Interconnection Customer shall at all times indemnify, defend, and save PVREA harmless from, any and all damages, losses, claims, including claims and actions relating to injury to or death of any person or damage to property, demand, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties, arising out of or resulting from Interconnection Customer's action or inactions of its obligations under this Agreement, except in cases of gross negligence or intentional wrongdoing by PVREA.

7. Insurance

Nameplate rating <25kW no additional insurance required.

8. Limitation of Liability

Each Party's liability to the other Party for any loss, cost, claim, injury, liability, or expense, including reasonable attorney's fees, relating to or arising from any act or omission in its performance of this Agreement, shall be limited to the amount of direct damage actually incurred. In no event shall either Party be liable to the other Party for any indirect, incidental, special, consequential, or punitive damages of any kind whatsoever, except as allowed under the Indemnification Section of the Agreement.

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9. Termination

The Agreement to operate in parallel may be terminated under the following conditions:

- 9.1. By the Interconnection Customer: By providing written notice to PVREA.
- 9.2. By PVREA: If the Small Generating Facility fails to operate for any consecutive twelve (12) month period or the Interconnection Customer fails to remedy a violation of these Terms and Conditions.
- 9.3. Permanent Disconnection: In the event this Agreement is terminated, PVREA shall have the right to disconnect its facilities or direct the Interconnection Customer to disconnect its Small Generating Facility.
- 9.4. Survival Rights: This Agreement shall continue in effect after termination to the extent necessary to allow or require either Party to fulfill rights or obligations that arose under the Agreement.

10. Assignment/Transfer of Ownership of the Facility

This Agreement shall apply to the Small Generating Facility and it will survive the transfer of ownership of the Small Generating Facility to a new owner only after the new owner agrees in writing with PVREA on its form to comply with the terms of this Agreement ; and the Interconnection Customer shall remain liable to PVREA under the Agreement until the transfer of ownership to a new owner has been accepted by PVREA.

11. Certification of Small Generator Equipment Packages

- 11.1. Small Generating Facility equipment proposed for use separately or packaged with other equipment in an interconnection system shall be considered certified for interconnected operation only if (1) it has been tested in accordance with industry standards for continuous utility interactive operation in compliance with the appropriate codes and standards listed in Attachment 2 by any Nationally Recognized Testing Laboratory (NRTL) recognized by the United States Occupational Safety and Health Administration to test and certify interconnection equipment , (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 Interconnection Customer 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.
- 11.2. 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.
- 11.3. 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.
- 11.4. If the certified equipment package includes only interface components, including, without limitation, 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.
- 11.5. 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 Interconnection Customer side of the Point of Interconnection shall be required to meet the requirements of this interconnection procedure.
- 11.6. An equipment package does not include equipment provided by PVREA.

Attachment 2:

Certification Codes and Standards

1. IEEE1547 Standard for Interconnecting Distributed Resources with Electric Power Systems (including use of IEEE 1547.1 testing protocols to establish conformity)
2. UL 1741 Inverters, Converters, and Controllers for Use in Independent Power Systems

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3. IEEE Std 929-2000 IEEE Recommended Practice for Utility Interface of Photovoltaic (PV) Systems NFPA 70 (2005), National Electrical Code
4. IEEE Std C37.90.1-1989 (R1994), IEEE Standard Surge Withstand Capability (SWC) Tests for Protective Relays and Relay Systems
5. IEEE Std C37.90.2 (1995), IEEE Standard Withstand Capability of Relay Systems to Radiated Electromagnetic Interference from Transceivers
6. IEEE Std C37.108-1989 (R2002), IEEE Guide for the Protection of Network Transformers
7. IEEE Std C57.12.44-2000, IEEE Standard Requirements for Secondary Network Protectors
8. IEEE Std C62.41.2-2002, IEEE Recommended Practice on Characterization of Surges in Low Voltage (1000V and Less) AC Power Circuits
9. IEEE Std C62.45-1992 (R2002), IEEE Recommended Practice on Surge Testing for Equipment Connected to Low-Voltage (1000V and Less) AC Power Circuits
10. ANSI C84.1-1995 Electric Power Systems and Equipment – Voltage Ratings (60 Hertz)
11. IEEE Std 100-2000, IEEE Standard Dictionary of Electrical and Electronic Terms
12. NEMA MG 1-1998, Motors and Small Resources, Revision 3
13. IEEE Std 519-1992, IEEE Recommended Practices and Requirements for Harmonic Control in Electrical Power Systems
14. NEMA MG 1-2003 (Rev 2004), Motors and Generators, Revision 1 Revision