SAN LUIS VALLEY REC
POWERING A VITAL VALLEY
3625 US Hwy 160 W • P.O. Box 3625 • Monte Vista, Colorado 81144-3625
(719) 852-3538 • 1-800-332-7634 • Fax: (719) 852-6670
www.slvrec.com • power@slvrec.com

Dear San Luis Valley Rural Electric Cooperative Member,

Enclosed is San Luis Valley Rural Electric Cooperative Net Metering Application for interconnecting your new renewable energy facility with SLVREC's electric grid. Also, please find our Distributed Generation-Net Metering Guidelines manual enclosed which contains information regarding our interconnection policies.

In order to proceed with your net meter installation, please supply all of the following:

- Completed and signed Net Metering Application
- Proof of $300,000 liability insurance coverage on the residence to which the system is tied
- $100 application fee made payable to San Luis Valley Rural Electric Cooperative

Once all the necessary documentation is received, SLVREC will provide a letter authorizing you to proceed with your project.

There is a $100.00 meter fee due on or before the final inspection and meter installation by SLVREC.

If you have any questions, please don't hesitate to call!

Sincerely,

Loren Howard
lhhoward@slvrec.com
719-852-6630

SAN LUIS VALLEY RURAL ELECTRIC COOPERATIVE, INC.
ELECTRIC RATE TARIFF
Schedule NM

Application:
Applicable to a Net Meter Distributed Generation facility (DG facility) connected to the Cooperative's electric system.

A DG facility is defined as a renewable electric generating facility that meets the following requirements:

1. The system uses as its energy source solar, wind, biomass, or hydropower resources or other PURPA qualifying resource.
2. Residential DG facilities may be designed with a capacity the greater of:
    a. 10 kilowatts; or
    b. 120% of the previous 12 months electric energy consumption, up to 25 kW; or
    c. 120% of the estimated annual electric energy consumption, up to 25 kW if the DG facility will be installed on a new service. Estimates of electric energy consumption must be approved by the Cooperative.
3. Commercial DG facilities connected may be designed with a capacity up to 25 kW.
4. The system must be located on premises owned, operated, leased, or otherwise controlled by a SLVREC member.

A member must submit a Net Meter Distributed Generation Application (Application) prior to interconnecting each DG Facility to the Cooperative's electric system. Each Application must include a $100.00 application fee.

DG facilities require two meters in accordance with the Net Meter Distributed Generation Guideline. A $100.00 meter fee is also required for each DG facility.

DG Facilities must be installed 'behind the meter' on a new or existing electric service supplied by the Cooperative.

When the electricity supplied by the member exceeds the energy supplied by the Cooperative during a billing period, the excess electricity shall be banked for usage in the next billing period. Annually in April, excess electricity banked to a members' account shall be purchased by the Cooperative at the Cooperative's average cost of wholesale power of the previous calendar year.

Electricity supplied by the Cooperative will be billed according to the applicable tariff.

Rules and Regulations:
This tariff is subject to SLVREC's Electric Service Terms and Conditions and Net Meter Distributed Generation Guideline. The Electric Service Terms and Conditions tariff is available upon request.

Loren H. Howard Chief Executive Officer	January 29, 2019 Issue Date
Signature	April 1, 2019 Effective Date

SAN LUIS VALLEY RURAL ELECTRIC COOPERATIVE
Net Meter Distributed Generation Application

Please attach a $100.00 application fee. A $100.00 metering fee is due on or before final inspection and installation of SLVREC meters.

Owner Information

Owner Name _____

Mailing Address _____

Mailing City _____

Mailing State _____ Mailing Zip Code _____

Phone Number _____

Physical Installation Information

Street Address _____

City: _____ County: _____

State: _____ Zip Code _____

GPS Coordinates _____

Project Designer/Engineer

Company _____

Address _____

City _____

State _____ Zip Code _____

Phone Number _____

Contact Person _____

Electrical Contractor

Company _____

Address _____

City _____

State _____ Zip Code _____

Phone Number _____

Contact Person _____

Generation

Photovoltaic ☐ **Wind** ☐

Total Output (kW) _____

Load Information

Total Site Load _____ (kW)

Project Description

Give a general description of the proposed installation, including when you plan to operate the generator.

_____

_____

_____

_____

_____

_____

Generator Data

Manufacturer _____

Type _____

Output (per unit) _____ kilowatts

Power Factor (%) _____

Voltage _____

Amperes _____

Inverter Data

Manufacturer _____

Model _____

DC Power (watts) _____DC Voltage _____ DC Current (amperes _____

AC Power (watts) _____ AC Voltage _____ AC Current (amperes) _____

Power Factor (%) _____

Hardware and Installation Compliance

The system hardware is in compliance with Underwriters Laboratories(UL) 1741 Standard for Static Inverters and Charge Controllers for Use in Photovoltaic Systems: UL 1703, Standard for Safety, flat-Plate Photovoltaic Modules and Panels; and IEEE 1262-1995, IEEE Recommended Practice for Qualification of Photovoltaic (PV) Modules.

The system has been installed in compliance with IEEE Standard 929-2000, Recommended Practice for Utility Interface of Photovoltaic Systems and with applicable requirements of local electrical codes and the National Electric Code® (NEC)

The system has been installed in compliance with IEEE Standard 519; IEEE Recommended Practices and Requirements for Harmonic Control in Electrical Power Systems

Signed (Owner\Contractor) _____

Name (Print) _____

Date _____

Documentation Requirements

Attach a detailed one-line diagram of the proposed facility, major equipment (generators, transformers, inverters, circuit breakers, protective relays, etc.), specifications, test reports, etc., and any other applicable drawings or documents necessary for the proper design of the interconnection.

Prior to interconnection, the Member must provide proof of insurance coverage as required in the Net Metering Guidelines.

The Member agrees to provide the Cooperative with any additional information required to complete the interconnection. The Member shall operate their equipment within the guidelines set forth by the Cooperative.

_____ _____

Member Date

Cooperative contact:	Loren H. Howard, PE
Address:	3625 US Hwy 160 W Monte Vista, CO 81144
Phone:	(719) 852-3538
Fax:	(719) 852-6655

San Luis Valley Rural Electric Cooperative, Inc.
Net Meter Distributed Generation Guideline

GENERAL

In order to receive electric service from San Luis Valley Rural Electric Cooperative, Inc. (SLVREC), a customer must join or become a member (Member) of San Luis Valley Rural Electric Cooperative, Inc. For more information about SLVREC's membership application process, please contact Customer Service at 719-852-3538.

SLVREC permits Members to install a Net Metered Distributed Generation (DG) facility, provided the Member's DG facility does not adversely affect the operation and reliability of SLVREC's electric system. The Member must conduct their own analysis to determine the economic benefit of DG operation.

A DG facility connected in any way to SLVREC's system must receive approval from SLVREC prior to installation.

This guideline is not a complete description or listing of all laws, ordinances, rules and regulations, nor is this guideline intended to be an installation or safety manual. The Member requesting to interconnect a DG facility to SLVREC's system must follow all provisions of this guideline, SLVREC's *Rules and Regulations and Tariffs for Electric Service*, SLVREC's *Line Extension Policy*, the current *IEEE 1547 Standard Guide for Distributed Generation Interconnection* (a copy is on file at SLVREC for inspection along with information so the Member may obtain his/her own copy), other applicable IEEE standards, applicable ANSI standards, including ANSI C84.1 Range A and any other applicable governmental and regulatory laws, rules, ordinances or requirements. All legal, technical, financial requirements in the following sections of this Manual must be met prior to interconnection of the DG facility to SLVREC's system.

A DG facility may serve any load behind the meter at the location of the DG facility but is not permitted to serve multiple meters, multiple consuming facilities or multiple Members with a single DG facility or under a single DG application without prior approval by SLVREC.

I. DETERMINE THE SIZE OF THE DISTRIBUTED GENERATION FACILITY

1) DG Project Size
   a) Residential
      A residential DG facility connected in a Net Metering installation may designed with a capacity up to the greater of:
      i) Up to10 kilowatts; or
      ii) 120% of the previous 12 months electric energy consumption, up to 25 kW; or
      iii) 120% of the estimated 12 month electric energy consumption, up to 25 kW if the DG facility will be installed on a new service. The design capacity factor for a DG facility shall be 20%.

   b) Commercial
      Up to 25 kilowatts

2) Qualifying Facilities

   a) Qualifying Facilities (QF) are defined by the Public Utility Regulatory Policies Act of 1978 (PURPA). Refer to CFR Title 26, Volume 4, Sec. 292.204. SLVREC allows only QF facilities to be net metered. A QF must have as its primary energy source biomass, waste, wind, solar, geothermal resources or any combination. See PURPA for a full description.

b) SLVREC will provide interconnection for a DG facility to Members, subject to the provisions of this guideline and all other applicable rules and regulations.

II. MEMBER'S INITIAL REQUIREMENTS

1) Members must meet all SLVREC's membership and service requirements in addition to the requirements in the guideline.

2) In advance of constructing a DG facility, the Member must complete the San Luis Valley Rural Electric Cooperative Net Meter/Distributed Generation Application and include a $100.00 application fee.

3) A separate application form must be submitted for each facility.

III. COOPERATIVE REVIEW PROCESS

1) SLVREC will review the application and accompanying documents, plans, specifications, and other information provided and will return a letter authorizing the construction the proposed facility to the Member within 60 days.

2) Technical review will be consistent with guidelines established by the most recent *IEEE Standard 1547 Guide for Distributed Generation Interconnection.* The Member may be required by SLVREC to provide proof that their DG facility have been tested and certified by applicable IEEE guidelines.

3) If corrections or changes to the plans, specifications and other information are made by the Member, the 60 day period may be reinitialized when such changes or corrections are provided to SLVREC. In addition, any changes to the site or project requiring new analysis by SLVREC will require a new Net Meter/Distributed Generation Application.

4) The Member acknowledges and agrees that any review or acceptance of such plans, specifications and other information by SLVREC shall not impose any liability on SLVREC and does not guarantee the adequacy of the Member's equipment or DG facility. SLVREC disclaims any expertise or special knowledge relating to the design or performance of generating installations and does not warrant the efficiency, cost-effectiveness, safety, durability, or reliability of such DG installations.

5) In the event it is necessary at the time of initial interconnection or at some future time for SLVREC to modify electric delivery systems in order to serve the Member's DG facilities, or because the quality of the power provided by the Member's DG adversely affects SLVREC's delivery system, the Member will be responsible to pay SLVREC for all costs of modifications required for the interconnection of the Member's DG facilities.

IV. SALES TO AND PURCHASES FROM A DG FACILITY

1) Power produced by the DG facility will be compensated by netting the kilowatt-hours generated against the kilowatt-hours consumed.

2) When the kilowatt-hours produced by the DG facility are less than the kilowatt-hours consumed by the Member, SLVREC shall bill the Member according to SLVREC's applicable retail rate schedule including the net electricity supplied to the Member during the billing period.

3) When the monthly production of electricity supplied by the DG facility is greater than or equal to the kilowatt-hours consumed by the Member, the monthly charge and/or minimum bill of the retail rate schedule shall be billed by SLVREC. Any excess electricity produced will be credited to the Member's account and carried forward. On April 30 of each year, any excess accrued electricity produced by the DG facility during the preceding 12 months will be calculated by SLVREC. The excess electricity produced by the DG facility will be purchased from the Member at the SLVREC's average wholesale power cost calculated over the same May 1 through April 30 period.

4) SLVREC shall not be required to make any purchases that will cause SLVREC to no longer be in compliance with any applicable contracts or all-power contract requirements with its power supplier(s).

V. MEMBER'S RESPONSIBILITY PRIOR TO OPERATION

1) Line Extension and Modifications to Cooperative Facilities

   a) As a part of the interconnection analysis performed by SLVREC, the Member will be provided with an estimate of any line extension or other cost to be incurred in providing electric delivery service to the Member's DG facility. The Member shall pay, in advance, the full cost of the construction of any transmission, substation, distribution, transformation, metering, protective relaying, or other facilities or equipment which, at the sole discretion of SLVREC is required to serve the DG facility.

   b) The DG facility shall not energize the San Luis Valley Rural Electric Cooperative power system when the area power system is de-energized.

2) Liability Insurance

   a) The Member must provide proof of general liability insurance in the following amounts:
      i) $300,000 for systems with installed capacity of 10kW or less.
      ii) $1,000,000 for systems with installed capacity greater than 10kW.

   b) The amount of the insurance may be increased at the sole discretion of SLVREC if the nature of the project so requires.

   c) The insurance policy will not be changed or canceled without thirty days written notice to SLVREC.

   d) Member must provide proof of continued insurance annually.

   e) SLVREC must be listed as a named insured.

3) Initial Interconnection

   a) After completion of the application and review process and prior to initiation of service, SLVREC will conduct a final inspection of the facilities and interconnection to SLVREC's system.

   b) SLVREC will install the appropriate meters on the DG facility after the final inspection and upon payment of a $100.00 meter installation fee.

c) SLVREC's review process and final inspection is intended as a means to safeguard SLVREC's facilities and personnel.

VI. OPERATION OF DG FACILITY

1) Ownership of Facility

   a) The Member shall own and be solely responsible for all expense, installation, maintenance and operation of all equipment, including all power generating facilities, at and beyond the point of delivery as defined in SLVREC's tariffs.

   b) At its sole discretion, SLVREC may locate cooperative owned metering equipment and transformers past the point of delivery.

2) Self-Protection of DG Facilities

   a) The Member will furnish, install, operate and maintain in good order and repair all equipment necessary for the safe operation of DG facilities interconnected with SLVREC's electric system.

   b) The DG facility must have the ability to both establish and maintain synchronism with SLVREC system and to automatically disconnect and isolate the DG facility from SLVREC system when power from the SLVREC electric system is off.

   c) The DG facility will be designed, installed and maintained to be self-protected from normal and abnormal conditions on SLVREC system including, but not limited to, overvoltage, undervoltage, overcurrent, frequency deviation, and faults. Self-protection will be compatible with all applicable SLVREC protection arrangements and operating policies.

   d) Additional protective devices and/or functions may be required by SLVREC when, in the sole judgment of SLVREC, the particular DG facility installation and/or SLVREC system characteristics so warrant.

3) Quality of service

   a) The DG facility will generate power at the nominal voltage of SLVREC's system at the delivery point as defined by ANSI C84.1 Range A.

   b) The DG facility will generate power at a frequency within the tolerances as defined by IEEE 1547.

   c) The DG facility shall produce power at a minimum power factor of at least 95%.

   d) The DG facility shall be in accordance with the power quality limits specified in IEEE 519.

   e) The overall quality of the power provided by the DG facility including, but not limited to, the effects of harmonic distortion, voltage regulation, voltage flicker, switching surges and power factor, will be such that SLVREC system is not adversely affected in any manner.

4) Disconnection of DG Facility

   a) The DG facility shall include the installation of a visible load break disconnect switch. The switch will be readily accessible to SLVREC personnel and of a type that can be secured in an open position by a SLVREC lock.

b) SLVREC reserves the right to operate the disconnect switch for the protection of SLVREC system even if it affects the operation of the DG facility. In the event SLVREC opens the disconnect switch:
   i) SLVREC shall not be responsible for restoring the DG facility to service.
   ii) SLVREC will make reasonable efforts to notify the Member.

c) The Member will not bypass the disconnect switch at any time for any reason.

d) Signage shall be placed by SLVREC at the switch indicating the purpose of the disconnect switch along with names and phone numbers of appropriate SLVREC personnel.

e) Should SLVREC lose power serving a DG facility for any reason, the DG facility shall not operate unless visibly disconnected from SLVREC system.

f) SLVREC may, at its sole discretion, prevent the interconnection or disconnect the interconnection of a DG facility due to reasons such as safety concerns, reliability issues, power quality issues, breach of interconnection contract or any other reasonable issue. **Any disconnection may be without prior notice**.

5) Access

a) Persons authorized by SLVREC will have the right to enter the Member's property for purposes of testing, operating the disconnect switch, reading or testing the metering equipment, maintaining right-of-way or other DG facility equipment and/or Cooperative service requirement. Such entry onto the Member's property may be without notice.

b) If the Member erects or maintains locked gates or other barriers, the Member will furnish SLVREC with convenient means to circumvent the barrier for full access for the above-mentioned reasons.

6) Metering/Monitoring

a) SLVREC shall specify, install and own all metering equipment. Each DG facility shall provide for the installation of two meters, one measuring the flow of electricity on the interconnection with the SLVREC electric system and one meter measuring the production of electricity from the DG facility.

b) The meter shall be read at a time or times of month determined at SLVREC's sole discretion for acquiring metering data. The Member shall provide SLVREC an approved communications link at the Member's cost for this purpose if so requested by SLVREC. The type of communications link and metering equipment measuring purchase of power by SLVREC shall be installed and specified at the sole discretion of SLVREC.

c) Meter testing shall follow SLVREC's standard policy on metering testing and accuracy.

7) Notice of Change in Installation

a) The Member will notify SLVREC in writing thirty (30) days in advance of making any change affecting the characteristics, performance, or protection of the DG facility.

b) If any modification undertaken by the Member will create or has created conditions which may be unsafe or adversely affect SLVREC system, the Member shall immediately correct such conditions or be subject to immediate disconnection from SLVREC system.

c) Any change in the operating characteristics of the DG facility including, but not limited to, size of generator, total facility capacity, nature of facility, fuel source, site change, hours of operation, or type used, may require a new application process, including, but not limited to, application form, application fee, DG plan and DG plan review by SLVREC.

8) Testing and Record Keeping

a) The Member will test all aspects of the protection systems up to and including tripping of the generator and interconnection point at start-up and thereafter as required. Testing will verify all protective set points and relay/breaker trip timing and shall include procedures to functionally test all protective elements of the system. SLVREC may witness the testing.

b) The Member will maintain records of all maintenance activities, which SLVREC may review at reasonable times.

9) Compliance with Laws, Rules and Tariffs

The DG installation owned and installed by the Member shall be installed and operated subject to and in accordance with the terms and conditions set forth in SLVREC's rules, regulations, bylaws, rates and tariffs, as amended from time to time, and, if applicable, approved by SLVREC's board of directors, which are incorporated herein by reference, and in compliance with all applicable federal, state and local laws, regulations, zoning codes, building codes, safety rules, environmental restrictions, ordinances and regulations, including without limitation, and in accordance with industry standard prudent engineering practices. A system that is net metered is not eligible to be under any Time-of-Day rate schedule.

10) Liability for Injury and Damages

(a) The Member assumes full responsibility for electric energy furnished at and past the point of interconnection and shall indemnify SLVREC and/or its Power Supplier against and hold SLVREC and/or its Power Supplier harmless from all claims for both injuries to persons, including death resulting there rom, and damages to property occurring upon the premises owned or operated by Member arising from electric power and energy delivered by SLVREC or in any way arising directly or indirectly from the Member's DG facility.

(b) SLVREC and/or its Power Supplier shall not be liable for either direct or consequential damages resulting from failures, interruptions, or voltage and waveform fluctuations occasioned by causes reasonably beyond the control of SLVREC and/or its Power Supplier including, but not limited to, acts of God or public enemy, sabotage and/or vandalism, accidents, fire, explosion, labor troubles, strikes, order of any court or judge granted in any bona fide adverse legal proceeding or action, or any order of any commission, tribunal or governmental authority having jurisdiction. ALL PROVISIONS NOTWITHSTANDING, IN NO EVENT SHALL SLVREC BE LIABLE TO THE MEMBER FOR ANY INTEREST, LOSS OF ANTICIPATED REVENUE, EARNINGS, PROFITS, OR INCREASED EXPENSE OF OPERATIONS, LOSS BY REASON OF SHUTDOWN OR NON-OPERATION OF MEMBER'S PREMISES OR FACILITIES FOR ANY INDIRECT, INCIDENTAL, OR CONSEQUENTIAL, PUNITIVE OR EXEMPLARY DAMAGES ARISING OUT OF OR

RELATED, IN WHOLE OR PART, TO THIS AGREEMENT. SLVREC SHALL NOT BE LIABLE IN ANY EVENT FOR CONSEQUENTIAL DAMAGES.

(c) The Member is solely responsible for insuring his/her facility complies with all applicable regulations including, but not limited to, laws, regulations, ordinances, Cooperative and Cooperative Power Supplier tariffs, policies and directives.

Typical System Diagram