Truckee Donner Public Utility District

Distributed Energy Resources (DER) Interconnection Agreement for Net Energy Metering
Photovoltaic/Solar or Wind Electric Generating Facilities or Storage Facilities
Rated 1000 Kilowatts Or Less

_____________________________ ("Customer or Customer-Generator") and Truckee Donner Public Utility District ("District") referred to collectively as "Parties" and individually as "Party," agree as follows:

1. **Service Eligibility**
   At all times during the term of this Interconnection Agreement, Customer shall qualify as an "eligible customer-generator", as such term is defined in Section 2827(b)(4) of the California Public Utilities Code. Customer also shall comply with the District’s Rate Schedules, as applicable, and all other applicable Codes and Ordinances of the District, now or hereafter in effect.

2. **Generating Facility**
   The photovoltaic/solar or wind electric generating facility or storage facilities, e.g. battery system ("Equipment", "Facility" or "Facilities"), with which the Customer will interconnect and operate in parallel, with the exception of battery storage, with the District’s electric utility distribution system, is described below:

   2.1. Equipment Manufacturer and Model Number:
   - Solar Array or Wind Generator: __________________________________________
   - Battery System: ______________________________________________________
   - Inverter: ____________________________________________________________

   The Customer shall also attach generating or storage facility drawings or manufacturer’s literature documenting the requirements of Sections 2.1 and 2.2.

   2.2. Photovoltaic/Solar (PV) Array or Wind Generator Rating: _____________ kw
   - Battery Storage Capacity _____________ kw Peak _____________ kWh capacity

   2.3. Location of Facilities:
   - Street Address ______________________________________________________
   - APN _____________________________

   2.4. Facility will be ready for operation on or about: ____________________ (date)

   2.5. Substation and Circuit No. Information (District will supply information):

   ________________________________________________________________

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**Customer-Generator**

By: ________________________________
Name: ________________________________
Title: ________________________________
Date: ________________________________

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**Truckee Donner Public Utility District**

By: ________________________________
Name: ________________________________
Title: Electric Utility Director
Date: ________________________________
3. Payment for Net Energy
   3.1. In the event the energy generated by the Facility exceeds the energy consumed on the Customer-Generator's premise during any billing period, payment for net as-available energy delivered to District shall be in accordance with Electric Rate Schedule NM.

   3.2. District reserves the right to apply the value of District's purchase of energy toward any bill to Customer-Generator for electric service by District to Customer-Generator at the location specified in Section 2.3. Customer-Generator shall pay any amount owing for electric service provided by the District in accordance with Electric Rate Schedule NM. Nothing in this Section 3.2 shall limit District's rights under applicable rate schedules.

   3.3. On and after the date District gives its written approval for parallel operation pursuant to Section 7, District shall pay Customer-Generator for net as-available energy at prices authorized from time to time by the District and which are derived from District's monthly average non-firm electric energy price the District pays during the applicable month.

4. Renewable Energy Credits and Environmental Attributes
   4.1. The District shall retain all renewable energy credits and Environmental Attributes associated with each watt of renewable resource generation capacity installed under this Agreement. The District reserves the right to read the inverter meter as often as it deems necessary to accurately account for all renewable energy credits. The District will count this generation toward its Renewable Portfolio Standard and will not sell the renewable energy credits. Additionally, the District reserves the right to aggregate this resource with other resources of similar characteristics to minimize administrative cost and oversight.

   4.2. "Environmental Attributes" means any and all credits, benefits, emissions reductions, offsets, and allowances, howsoever entitled, attributable to the generation from the Facility, and its displacement of conventional energy generation. Environmental Attributes include but are not limited to: (1) any avoided emissions of pollutants to the air, soil or water such as sulfur oxides (SOx), nitrogen oxides (NOx), carbon monoxide (CO) and other pollutants; (2) any avoided emissions of carbon dioxide (CO2), methane (CH4) and other greenhouse gases (GHGs) that have been determined by the United Nations Intergovernmental Panel on Climate Change to contribute to the actual or potential threat of altering the Earth’s climate by trapping heat in the atmosphere.

5. Interruption Or Reduction Of Deliveries
   5.1. District shall not be obligated to accept or pay for deliveries of as-available energy, and may require Customer-Generator to interrupt or reduce deliveries of as-available energy when: (a) necessary in order to construct, install, maintain, repair, replace, remove, investigate or inspect any of its equipment or part of its system; or (b) if the District determines that curtailment, interruption or reduction is necessary because of emergencies, forced outages, force majeure or compliance with prudent electrical utility practices.

   5.2. Whenever possible, District shall give Customer-Generator reasonable notice of the possibility that interruption or reduction of deliveries may be required.

   5.3. Notwithstanding any other provision of this Agreement, if at any time District determines that either (a) the Facility may endanger District personnel, the general public or (b) the continued operation of Customer-Generator's Facility may endanger the integrity of District's electric system, District shall have the right to disconnect Customer-Generator's Facility from District's electric system. Customer-Generator's Facility shall remain disconnected until such time as District is satisfied that the condition(s) referenced in (a) or (b) of this Section 5.3 have been corrected, and the District shall not be obligated to compensate Customer-Generator for any loss or use of generation of energy during any and all periods of such disconnection.

6. Design Requirement
   6.1. Customer shall or shall cause the design, installation, operation, maintenance and repair of the Equipment, and shall obtain and maintain the required governmental authorizations, permits, and any policy or policies of insurance, as may be required by applicable laws, and this Agreement.

   6.2. Customer shall comply with all applicable photovoltaic/solar or wind electrical generating system safety and performance standards established by or under the National Electrical Code (NEC), the
Institute of Electrical and Electronics Engineers (IEEE) and accredited testing laboratories, including, without limitation, Underwriters Laboratories (UL), and in accordance with other applicable rules and regulations. The Customer shall comply with the ordinances and requirements of local agencies with jurisdiction over premises where the facilities are installed, such as the Town of Truckee, Nevada County, and Placer County, pertaining to the safety and reliability of electrical generating systems and applicable building codes.

6.3. When references are made to published specifications, codes, standards, or other requirements, it shall be understood that where no date is specified, only the latest specifications, codes, standards, or requirements of the respective issuing agencies which have been published as of the date that the Agreement is signed, shall apply.

7. Interconnection
7.1. Customer-Generator shall deliver the as-available energy to the District at the electric meter.
7.1.1. Exception: Battery systems shall not operate in parallel with District facilities.
7.2. Customer-Generator shall connect DERs (Distributed Energy Resources) to existing services with loads or new services with proposed loads. The estimated system capacity may not exceed the historical annual loads of existing services or the estimated annual loads of new services. For new construction, the Customer-Generator shall submit either of the following to ensure this requirement is met:

7.2.1. The California Energy Code (CEC) Title 24 and JA11 calculations; or
7.2.2. Engineering calculations, panel schedules, and JA11 calculations.
7.3. Customer-Generator shall pay for designing, installing, operating and maintaining the Facilities in accordance with all applicable laws, rules and regulations and shall comply with District’s Interconnection Standards as may be set forth in this Agreement, applicable Rate Schedule, District Code or Ordinance and as contained in Appendix A (the “Interconnection Standards”), which is attached hereto and incorporated to this Interconnection Agreement by reference.
7.4. The Customer-Generator shall install adequate protective devices to protect its Facilities from overcurrent, over or under voltage, switching transients and lightning.
7.5. District shall furnish and install a standard watt-hour meter at the Customer’s expense. Customer-Generator shall provide and install a meter socket and related equipment in accordance with District standards.
7.6. Customer-Generator Facilities greater than 10kW shall require a dedicated transformer which serves only the Customer. The transformer that is part of the existing electrical service connection to a Customer’s Facility may meet this requirement if it is of sufficient capacity and no other customers are connected to the same transformer. A Customer-Generator Facility less than 10kW may not require a dedicated transformer; however a larger transformer may be required. The District reserves the right to make the determination for this requirement for each proposed Facility. All costs associated with replacing an existing transformer or the installation of a dedicated transformer shall be at the Customer’s expense.
7.7. Modifications to the District’s electrical distribution system may be required to accommodate Customer-Generator Facilities. All costs associated with required modifications shall be at the Customer’s expense.
7.8. Customer-Generator shall not commence parallel operation of the generating Facility until written approval of the interconnection Facilities has been given by the District. Such approval shall not be unreasonably withheld. The District’s process is as follows:

7.8.1. The Customer-Generator submits a complete Agreement and design package; then
7.8.2. The District will perform engineering review within 10 working days; then
7.8.3. The District will conduct an initial field review within 5 working days; then
7.8.4. Upon engineering approval, the District notifies the Town to issue permit; then
7.8.5. Customer-Generator completes installation and provides notice to the District;
7.8.6. Within 5 working days of notice of completion, the District will perform system installation;
7.8.7. When system passes District inspection, the District notifies the Town of final acceptance.

7.9. The Customer-Generator shall insure the delivery of only 60 Hz electric power into the District's system and at the designated service voltage.

7.10. Upon notification, the Customer-Generator shall eliminate, within ten (10) days from such notification, any radio or television interference and/or any other power quality problems that may arise from the Customer's Facilities.

8. Maintenance And Permits

Customer-Generator shall: (a) maintain the Facilities in a safe and prudent manner, in a location that is safe for the District to access, and in conformance with all applicable laws and regulations including, but not limited to, District's Appendix A and (b) obtain any governmental authorizations and permits required for the construction and operation of the Facilities. Customer-Generator shall reimburse District for any and all losses, damages, claims, penalties or liability it incurs as a result of Customer-Generator's failure to obtain or maintain any governmental authorizations and permits required for construction and operation of Customer-Generator's Facilities.

9. Access To Premises

During the term of this Interconnection Agreement, Customer grants to the District, its officers, employees, agents and representatives, the non-exclusive right of ingress and egress on, over and across the Customer's premises during the District's regular business hours and at all other times during outages or other emergencies, without prior notice, for the purpose of the following: (a) to inspect Customer-Generator's protective devices and reading or testing the on-site meters; (b) to disconnect, without notice, the interconnection Facilities if, in District's opinion, a hazardous condition exists and such immediate action is necessary to protect persons, or District's facilities, or property of others from damage or interference caused by Customer-Generator's Facilities, or lack of properly operating protective devices, and (c) to read the meter for billing purposes.

10. Indemnity And Liability

10.1. The Customer-Generator as indemnitor shall defend, save harmless and indemnify the other the District and its directors, officers, employees and agents against and from any and all loss, liability, damage, claim, cost, charge, demand, or expense (including any direct, indirect, or consequential loss, liability, damage, claim, cost, charge, demand or expense, including attorneys' fees) for injury or death to persons including employees of the District and damage to the District's property arising out of or in connection with (a) the engineering, design, construction, maintenance, repair, operation, supervision, inspection, testing, protection or ownership of, or (b) the making of replacements, additions, betterments to, or reconstruction of, the Customer-Generator's Facilities; provided, however, Customer-Generator's duty to indemnify District hereunder shall not extend to loss, liability, damage, claim, cost, charge, demand or expense resulting from interruptions in electrical service to District's customers other than interruptions caused by Customer-Generator. This indemnity shall not apply to the District for its loss, liability, damage, claim, cost, charge, demand or expense resulting from its active negligence or willful misconduct.

10.2. Notwithstanding the indemnity of Section 10.1, and except for a Party's willful misconduct or sole negligence, each Party shall be responsible for damage to its facilities resulting from electrical disturbances or faults.

10.3. The provisions of this Section shall not be construed to relieve any insurer of its obligations to pay any insurance claims in accordance with the provisions of any valid insurance policy.

10.4. Except as otherwise provided in Section 10.1, neither Party shall be liable to the other Party for consequential, indirect, special or punitive damages incurred by that Party.

10.5. If Customer-Generator fails to comply with the insurance provisions of this Agreement, if any, Customer-Generator shall, at its own cost, defend, save harmless and indemnify District, its directors, officers, employees, agents, assignees and successors in interest from and against any and all loss, liability, damage, claim, cost, charge, demand or expense of any kind or nature (including attorney's fees and other costs of litigation) resulting from the death or injury to any person or damage to any property, including the personnel and property of District. The inclusion of this Section 10.5 is not intended to create any express or implied right in Customer-Generator to elect not to provide any such required insurance.
10.6. The District and its officers, employees, and agents shall not be liable for any damages to the Facilities caused by an electrical disturbance of the District’s system or the system of another, whether or not the electrical disturbance results from the negligence of the District.

10.7. This Section 10 shall survive termination of this Interconnection Agreement.

11. Governing Law
11.1. This Agreement shall be interpreted, governed and construed under the laws of the State of California as if executed and to be performed wholly within the State of California.

11.2. Any action to enforce or interpret this Agreement shall be commenced and maintained only in the town of Truckee in the courts of the County of Nevada, California.

12. Amendment, Modification Or Waiver
12.1. Any changes or modifications to this Agreement shall be in writing and signed by both Parties. The failure of any Party at any time or times to require performance of any provision hereof shall in no manner affect the right at a later time to enforce the same.

12.2. Any waiver at any time by either Party of its rights with respect to a default under this Agreement, or with respect to any other matters arising in connection with this Agreement, shall not be deemed a waiver with respect to any subsequent default or other matter.

13. Successors In Interest and Assignment
This Agreement shall be binding on, and inure to the benefit of, each Party's successors in interest, including their heirs, legatees, assignees and legal representatives. Neither party may assign this Agreement nor any of its rights or duties hereunder without the prior written consent of the other party which consent shall not be unreasonably withheld; however, the Customer-Generator may not assign this Agreement to a successor-in-interest to the real property where the Facilities are located and the District may deny any request for such an assignment. Any assignment or delegation made without such written consent shall be null or void.

14. Attorney’s Fees
In any action between the Parties to enforce or interpret this Agreement or arising out of the performance of this Agreement, the prevailing Party shall be entitled to reasonable attorney’s fees, costs and expenses, including expert fees, in addition to any other relief to which that Party may be entitled. This provision shall be construed as applicable to the entire Agreement.

15. Notices
All written notices shall be directed, as follows:

DISTRICT:  
Truckee Donner Public Utility District  
Attn: District Clerk  
11570 Donner Pass Road  
Truckee, CA 96161

CUSTOMER-GENERATOR:  
Name:  
Company:  
Address:  
Phone:  

Customer-Generator’s notices to District pursuant to this Section 15 shall refer to the Facility description as set forth in Section 2.

16. Term Of Agreement
16.1. This Agreement shall be in effect when signed by the Customer-Generator and District and shall remain in effect thereafter on a month-to-month basis, unless terminated by either Party. The District may immediately terminate this Interconnection Agreement for any breach or violation of this Interconnection Agreement. This Interconnection Agreement may be terminated by either party, without cause, upon thirty (30) days prior written notice in accordance with Section 15. If both parties agree, this Interconnection Agreement may be terminated prior to thirty (30) days from the date written notice to terminate is tendered.

16.2. This Agreement shall terminate, without notice, upon: (a) termination of the electric service provided to the Customer-Generator by the District; or (b) changes the to the Customer-Generator’s load which cause the Customer-Generator to no longer satisfy all requirements of the definition of an Eligible Customer-Generator set forth in Section 2827 of the California Public Utilities Code.
17. **Notice of Change in Facility**

In the event any changes are to be made to the Facility, written notification must be given to the District in advance. Any change to the size of the Facility (i.e., increase or decrease in kW) or any other change that would affect the information provided in this Interconnection Agreement must be reported to the District. Failure to do so constitutes a breach of this Interconnection Agreement.

18. **Severability**

If any provision of this Interconnection Agreement is determined to be partially or wholly invalid, illegal, or unenforceable, then such provision shall be deemed to be modified or restricted to the extent necessary to make such provision valid, binding, and enforceable; or, if such provision cannot be modified or restricted in a manner so as to make such provision valid, binding or enforceable, then such provision shall be deemed to be excised from this Interconnection Agreement, and the validity, binding effect, and enforceability of the remaining provisions of this Interconnection Agreement shall not be affected or impaired in any manner.

19. **Appendix**

The Agreement includes the following appendix which is attached and incorporated to this Interconnection Agreement by reference, entitled: Appendix A, Distributed Energy Resources (DER) Interconnection Standards for Photovoltaic/Solar or Wind Electric Generating Facilities Rated 1000 Kilowatts Or Less.
APPENDIX A

Distributed Energy Resources (DER) Interconnection Standards
Photovoltaic/Solar or Wind Electric Generating Facilities Rated 1000 Kilowatts Or Less

A. General
1. This Appendix sets forth the requirements and conditions for interconnecting customer-owned photovoltaic/solar or wind electric generation facilities (DER) for parallel operation with the District’s electric distribution system. The interconnecting entity shall be designated Customer-Generator.

2. The Customer-Generator and/or their agents or representatives shall not make any substantial modifications to the generating Facility, including but not limited to alterations to the protective functions of the inverter, combiner panel, energy management device, or other protective devices, without prior written notification and approval by the District of any such proposed modifications. Customer–Generator shall submit a new Solar Application and Interconnection agreement to notify the District of with the proposed modification.

B. Requirements
1. The Customer-Generator’s Facility shall be installed in compliance with this Agreement, District Standards, and all applicable requirements of local building and electrical codes, and the National Electrical Code (NEC, latest version). Customer-Generator shall adhere to the following:
   a. All Customer-Generator systems shall be connected to a single service location which serves load.
   b. The 120% rule applies to the main bus rating of the panel (main service panel or subpanel) to which DER is connected.
      1. If DER connection is made at a subpanel, it shall also not exceed 120% of the main service bus rating.
   c. Install a dedicated circuit from service panel to the DER with an appropriately sized circuit breaker suitable for bi-directional use per NEC. Line or load side taps are not permitted.
      1. Exception: for services with a meter and main breaker only (meter-main), this circuit breaker may be installed in a subpanel.
   d. Label the breaker for the DER circuit at the panel to indicate solar, wind, or energy storage power source per NEC.
   e. The District will not approve any field modified panels.
      1. Exception: Field modified panels re-certified by a Nationally Recognized Testing Laboratory (NRTL).
   f. The burden of equipment protection is not the responsibility of the District, therefore the District will not accept line side taps. All DER shall connect to the load side of the service disconnecting means, such as the main breaker.
      1. Exception: An approved Electric Utility Service Equipment Requirements Committee (EUSERC) “Solar-Ready” service panel with a dedicated circuit breaker shall be permitted upon prior District approval. Install an external disconnect switch in the dedicated circuit to the DER per Section B.2 below.

2. The Customer-Generator’s Facility shall be capable of being manually isolated from the District’s system by means of an external disconnect switch. The external disconnect switch shall meet the following requirements:
   a. Switch must be located within sight of and within 10 feet of the customer’s electric meter;
   b. Switch shall be clearly labeled “Generator Disconnect Switch,” or other label approved by the District;
   c. Switch shall provide a visible open point, and be capable of being locked in the open position by a pad lock device;
   d. Switch shall simultaneously disconnect all downstream DER;
   e. Switch shall be readily accessible to District personnel at all times; and
   f. The switch shall meet all requirements of Drawings A-1 and A-2, as applicable.
3. For services with multiple DER, all customer owned generation shall be consolidated through a combiner panel, inverter, micro-inverter, or other appropriate energy management device, and connected to a single dedicated circuit, as described above. Exceptions to this rule shall be coordinated with District personnel prior to installation.

4. The Customer-Generator’s inverter or combiner panel shall comply with the following standards for parallel operation with the District.
   a. Institute of Electrical and Electronics Engineers (IEEE) Std. 1547, “Standard for Interconnecting Distributed Resources with Electric Power Systems.”
   c. IEEE Std. 519, “Recommended Practices and Requirements for Harmonic Control in Electrical Power Systems.”

5. The maximum total and individual harmonic distortion for voltage and current injected by the Customer-Generator’s Facility into the District’s electrical distribution system shall conform to the requirements of IEEE Std. 519 and IEEE Std. 1547. A Facility causing harmonic interference is subject to being disconnected from the District’s electrical distribution system until the condition has been corrected. If the cause of the problem is traceable to the Customer-Generator’s Facility, all costs associated with determining and correcting the problems shall be at the Customer’s expense.

6. Any voltage flicker on District’s electrical distribution system caused by the Customer-Generator’s Facility shall not exceed the limits defined by the “Maximum Borderline of Irritation Curve” identified in IEEE Std. 519. Voltage flicker is a sudden change in voltage (occurring in seconds or fractions of a second) that can cause objectionable changes in the visible output of lighting systems. Voltage flicker requirements are necessary to minimize the adverse effects experienced by other customers on the District’s electrical distribution system.

7. The Customer-Generator’s Facility shall be capable of operating at some point within a power factor range of 0.95 leading to 0.95 lagging. Operation outside this range may be acceptable provided the cumulative power factor of the Customer’s entire Facility, measured at the electric meter, is within the noted range. All costs associated with correcting power factor problems shall be at the Customer’s expense.

End of Appendix A
NOTES:

1. ALL CUSTOMER-OWNED GENERATION SHALL CONNECT TO THE MAIN SERVICE PANEL VIA A DEDICATED CIRCUIT (APPENDIX A, SECTION B.1.C)


3. AN EXTERNAL DISCONNECT SWITCH SHALL BE INSTALLED IN THE DEDICATED CIRCUIT BETWEEN THE PANEL AND THE ENERGY MANAGEMENT DEVICE (APPENDIX A, SECTION B.2)

4. EXTERNAL DISCONNECT SWITCH SHALL BE INSTALLED WITHIN SIGHT OF AND WITHIN 10 FEET OF THE DISTRICT'S ELECTRIC METER AND LABELED (APPENDIX A, SECTION B.2)

5. DEDICATED CIRCUIT CONNECTION CAN BE MADE TO THE MAIN DISTRIBUTION PANEL OR A SUBPANEL (APPENDIX A, SECTION B.1.C)

6. ENERGY MANAGEMENT DEVICE SHALL BE CAPABLE OF PREVENTING BATTERY BACKFEED TO THE SERVICE