INTERCONNECTION AGREEMENT FOR SMALL SOLAR AND WIND ELECTRIC GENERATING FACILITIES OF 10 KILOWATTS OR LESS	DISTRIBUTION ☐ RE-RETAIL DIV. ☐ CITY ATTORNEY ☐ CITY MANAGER ☐ CITY CLERK

CUSTOMER ACCOUNT NO. _____

_____("Customer-Generator ") and the City of Roseville, a municipal corporation, ("City") referred to collectively as "Parties" and individually as "Party" have on this _____ day of _____, _____, entered into this "Interconnection Agreement For Small Solar Electric Photovoltaic (PV) and Wind Generating Facilities of 10 Kilowatts or Less" ("Agreement"); and,

WITNESSETH

WHEREAS, this Agreement applies to the Customer-Generator's generating facilities identified below with the specified characteristics and generating capacity, and does not allow interconnection or operation of facilities different than those described; and,

WHEREAS, Customer-Generator has elected to operate its solar electric generating facility of 10 kW or less in parallel with City's transmission and distribution facilities; and,

WHEREAS, the solar electric generating facility as identified below is intended to offset part or all of the Customer-Generator's own on-site electrical requirements; and,

NOW, THEREFORE, the Parties agree as follows:

1. DESCRIPTION OF CUSTOMER-GENERATOR'S SOLAR OR WIND ELECTRIC GENERATING FACILITY ("Facility"):

Project Identification Number: _____
(City use only)

Interconnected Equipment:

Table 1. – List of generating equipment interconnected with City distribution system with an inverter

(List the information requested below for all inverters interconnected with City's distribution and transmission network. Attach list of additional equipment if applicable.)

	Type of Generator (Solar/Wind/Hybrid)	Generator Rating (CEC PTC Watts-DC)	Manufacturer for Inverter used with Generator	Inverter Model Number	System Rating (Watts-AC)
1					
2					

Table 2. – List of generating equipment interconnected with CITY distribution system without an inverter

(List the information requested below for all generators directly interconnected without an inverter to City's distribution and transmission network. Attach list of additional equipment if applicable.)

	Type of Generator (Solar/Wind/Hybrid)	**Generator Rating (Watts)**
1		
2		

Site Address: _____
(Street)

_____
(City)

Customer Phone Number: _____

Customer E-Mail: _____

Customer Fax Number: _____

Customer Account Number: _____ Customer Class: _____

Facility will be ready for operation on or about _____
(date)

2. CUSTOMER BILLING AND PAYMENT

2.1 Choose Net Energy Billing Option:

___ Monthly Net Energy Billing.
or
___ Annual Net Energy Billing.

2.2 Net Energy is defined as measuring the difference between the electricity supplied by City through the electric grid to the eligible Customer-Generator and electricity generated by an eligible Customer Generator and fed back into the electric grid on either an annual or monthly basis, depending on selection made in Section 2.1.

2.3 In the event Customer-Generator chooses the monthly Net Energy billing option, Customer-Generator shall be billed in accordance with Roseville Municipal Code Chapter 14.24.051, as amended from time to time. City shall provide the eligible Customer-Generator with monthly Net Energy consumption or production information with each regular bill. Customer-Generator shall pay monthly for all non-consumption based charges and any Net Energy consumed. In monthly billing periods where Customer-Generator produces more

electricity than Customer-Generator consumes, non-consumption based charges will apply and the Customer-Generator will receive a credit for the Net Energy production. The credit will be valued based upon the consumption-based charges (e.g., per-kilowatt-hour charges) as indicated on the Solar Net Metering rate schedule. The Net Energy credit will be applied by City, at its sole discretion, towards remaining charges, if any, on Customer-Generator's bill or the cost of other City utility services received by Customer-Generator.

2.4 In the event Customer-Generator chooses the annual Net Energy billing option, Customer-Generator shall be billed in accordance with Roseville Municipal Code Chapter 14.24.051, as amended from time to time.

3. INTERRUPTION OR REDUCTION OF DELIVERIES

3.1. City shall not be obligated to accept or pay for and may require Customer-Generator to interrupt or reduce deliveries of as-available energy:

(a) when 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 it determines that curtailment, interruption, or reduction is necessary because of emergencies, forced outages, force majeure, or compliance with prudent electrical practices.

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

3.3. Notwithstanding any other provisions of this Agreement, if at any time City determines that either (a) the facility may endanger City personnel, or (b) the continued operation of Customer-Generator's facility may endanger the integrity of City's electric system, City shall have the right to disconnect Customer-Generator's facility from City's electric system. Customer-Generator's facility shall remain disconnected until such time as City is satisfied that the condition(s) referenced in (a) or (b) of this Section 3.3 have been corrected.

4. INTERCONNECTION AND METERING

4.1. Customer-Generator shall deliver the as-available energy to City at the utility's meter.

4.2. Customer-Generator shall pay for designing, installing, operating, and maintaining the solar-electric generating, facility in accordance with all applicable laws and regulations and shall comply with City's Appendix A, attached hereto and incorporated herein by this reference, Photovoltaic Interconnections Standards, which is attached hereto.

Net Energy metering shall be accomplished using a single meter capable of registering the flow of electricity in two directions. If the eligible Customer-Generator's existing electrical meter is not capable of measuring the flow of electricity in two directions, the eligible Customer-Generator shall be responsible for all expenses involved in purchasing and installing a meter that is able to measure electricity flow in two directions. An additional meter or meters, installed in a second meter socket, to monitor the flow of electricity in each direction may be installed with the consent of the eligible Customer-Generator, at the expense of City, and the collected data shall be used only to provide the information

necessary to accurately bill or credit the customer according to the utility's otherwise applicable tariff or to collect solar or wind, or a hybrid system of both, electric generating system performance information for research purposes. City shall determine whether metering of both flows of electricity is required under this provision. If multiple meters are installed, the Net Energy metering calculation shall yield a result identical to that of a single meter capable of measuring the flow of electricity in two directions. If City decides that multiple metering is required for the purposes set forth herein, and the eligible Customer-Generator refuses consent for installation of multiple metering, City shall have the right to refuse or terminate interconnection.

4.3. Customer-Generator shall not commence parallel operation of the generating facility until written approval of the interconnection facilities has been given by City. Such approval shall not be unreasonably withheld. City shall have the right to have representatives present at the initial testing of Customer-Generator's protective apparatus.

5. MAINTENANCE AND PERMITS

Customer-Generator shall: (a) maintain the solar-electric generating facility and interconnection facilities in a safe and prudent manner and in conformance with all applicable laws and regulations including, but not limited to, City's Appendix A, and (b) obtain any governmental authorizations and permits required for the construction and operation of the solar-electric generating facility and interconnection facilities. Customer-Generator shall reimburse City 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 authorization and permits required for construction and operation of Customer-Generator's generating facility.

6. ACCESS TO PREMISES

City may enter Customer-Generator's premises: (a) to inspect at all reasonable hours Customer-Generator's protective devices and read or test meter; and (b) to disconnect, without notice, the interconnection facilities if, in City's opinion, a hazardous condition exists and such immediate action is necessary to protect persons, City's facilities, or property of others from damage or interference caused by Customer-Generator's solar-electric facilities, or lack of properly operating protective devices.

7. RENEWABLE ENERGY & OTHER ENVIRONMENTAL CREDITS

As a condition of system interconnection, CITY assumes all rights and ownership to "renewable energy credits" (REC), credits/certificates for green house gas emissions, and other future "renewal" and "environmental" credits and/or certificates for as long as the contracted system is interconnected to the CITY electric distribution grid. The CITY may trade and/or utilize these credits, without notice, as deemed necessary and valuable for the benefit of CITY electric ratepayers.

8. INDEMNITY

Customer-Generator shall defend, indemnify, and save and hold harmless City, its officers, agents, and employees from any claims, suits or actions of every name, kind and description brought forth, or on account of, injuries to or death of any person (including, but not limited to, workers and the

public), or damage to property, resulting form or arising out of Customer-Generator's willful misconduct or negligent act or omission arising out this Agreement, except those matters arising from City's sole active negligence. The Parties intend that this provision shall be broadly construed.

9. GOVERNING LAW; VENUE; ATTORNEY'S FEES

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. Any action arising out of this Agreement shall be brought in Placer County, California, regardless of where else venue may lie. If either Party commences any legal action against the other Party arising out of this Agreement or the performance thereof, the prevailing Party shall be entitled to recover its reasonable litigation expenses, including but not limited to, court costs, expert witness fees, discovery expenses, and attorney's fees.

10. AMENDMENT, MODIFICATIONS OR WAIVER

Any amendments or modifications to this Agreement shall be in writing and agreed to by both Parties. The failure of any Party at any time or times to require performance of any provision hereof shall in no manner waive or affect any rights or obligations at any later time to enforce the same. No waiver by any Party of the breach of any term or covenant contained in this Agreement, whether by conduct or otherwise, shall be deemed to be construed as a further or continuing waiver of any such breach or waiver of the breach of any other term or covenant unless such waiver is in writing.

11. APPENDIX

This Agreement includes the following appendix, which is attached hereto and incorporated herein by reference:

Appendix A: City's Photovoltaic Interconnection Standards for Solar-Electric Generating Facilities of 10kW or Less.

12. NOTICES

All written notices shall be directed as follows:

City: Electric Utility Director
City of Roseville
2090 Hilltop Circle
Roseville, CA 95747-9704

CUSTOMER-GENERATOR:_____
Address:_____
City:_____

Customer-Generator's notices to City pursuant to this Section 12 shall refer to the PVID number set forth in Section 1.

13. TERM OF AGREEMENT

This Agreement shall be in effect when signed by the Customer-Generator and City and shall remain in effect unless terminated by either Party upon thirty (30) days prior written notice in accordance with Section 12.

IN WITNESS WHEREOF, the City of Roseville, a municipal corporation, has authorized the execution of this Agreement in duplicate by its City Manager and attested to by its City Clerk under the authority of Resolution No. 01-521 adopted by the Council of the City of Roseville on the 24th day of October, 2001 and Customer-Generator has caused this Agreement to be executed.

CITY OF ROSEVILLE, a municipal corporation:

BY: _____
RAY KERRIDGE
City Manager

ATTEST:

BY: _____
SONIA OROZCO
City Clerk

APPROVED AS TO FORM:

BY: _____
BRITA J. BAYLESS
City Attorney

APPROVED AS TO SUBSTANCE:

BY: _____
MICHELLE BERTOLINO
Electric Utilities Director

CUSTOMER-GENERATOR:
_____

BY: _____
its: _____

and

BY: _____
its: _____

APPENDIX A

PHOTOVOLTAIC INTERCONNECTION STANDARDS FOR SOLAR OR WIND ELECTRIC GENERATING FACILITIES OF 10 kW OR LESS

A. General

This Appendix sets forth the requirements and conditions for interconnected non-City-owned, solar or wind electric generation where such generation may be connected for parallel operation with the service of City. For purposes of this Appendix, the interconnecting entity shall be designated Customer-Generator.

B. Design Requirements

1. Customer-Generator shall conform to applicable National Electric Code (NEC) Standards [NEC 690] and applicable building codes.

    a. Customer-Generator shall have a dedicated circuit from the inverter to service panel with a circuit breaker or fuse [NEC 690-64(b)(1)].

    b. Customer-Generator's overcurrent device at the service panel shall be marked to indicate Photovoltaic or Wind power source [NEC 690-64(b)(4)].

2. The Customer-Generator's inverter shall have the following minimum specifications for parallel operation with City:

    a. Inverter output shall automatically disconnect from City source upon loss of City voltage and not reconnect until City voltage has been restored by City [NEC690-61].

    b. Inverter shall automatically disconnect from City source within two cycles if City voltage fluctuates beyond ± 10%.

    c. Inverter shall automatically disconnect from City within three cycles if City frequency fluctuates ± 2 cycles/second.

    d. Inverter output distortion shall meet IEEE 519 Standards.

    e. Inverter shall synchronize with City's power system voltage and frequency before closing in parallel.

3. Customer-Generator shall meet the interconnection requirements as outlined in IEEE 929 Std. 929-2000 or the most recent version of the IEEE 929 Standards.

4. A visible open disconnect device shall be located on the electrical supply conductors between the solar inverter or wind generator and the facility service panel.

5. Upon notification the Customer-Generator will, within ten (10) days from date of notification, eliminate any radio or television interference and/or any other power quality problems that may arise from the Customer-Generator Photovoltaic generation.