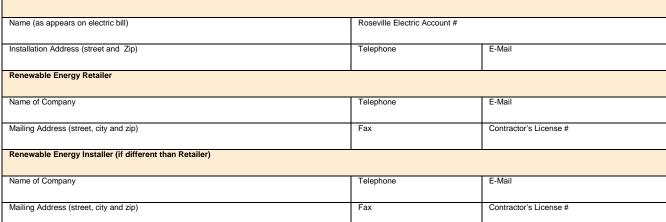
# Residential Renewable Energy Application



**Renewable Energy Programs for Residential Customers** 

## Form A - Mandatory - To be Completed by Installer

General Information	
Applicability and Purpose	Description of Service:
Who must complete this Application?	A new renewable energy system interconnecting to my existing electrical
All Roseville Electric customers wishing to install solar generating systems <i>greater than 1.0 AC kilowatt</i>	service.
but less than or equal to 10.0 AC kilowatts of installed capacity in parallel with Roseville Electric's electric service, must complete the applicable portions of this Application.	Physical changes to an existing interconnected renewable energy system which was previously approval by Roseville Electric (i.e. adding solar panels, changing inverters).
The customer's system shall at all times comply with Roseville Electric's Rule 21 as well as with all applicable laws, tariffs, electrical codes and applicable requirements of the City of Roseville. Rule 21 may be found at www.roseville.ca.us/Rule21	A new interconnection renewable energy system in conjunction with a new electrical service, Application for Service must be completed. Additional costs may be required if a service or line extension is required.
	Other: Please explain in space provided.
Customer Rebate Reservation:	
I AM applying for a Roseville Electric solar rebate and interconnection.	
• I am <b>NOT</b> applying for a Roseville Electric solar rebate, I am applying for an interconnection.	
Reservation for a rebate may only be made at the time of original installation and interconnection	Attach other documents as needed
Customer Information	
Customer Information	
Name (as appears on electric bill)	Roseville Electric Account #





# **Residential Renewable Energy Application**

**Equipment Information** 



Renewable Energy Programs for Residential Customers

Plea	Please fill out only the information which pertains to the system being installed.											
Please Note: A separate visible, manually operated and lockable AC disconnect switch (as detailed in Roseville Electric Rule 21) must be installed within 5 ft of the point of interconnection, meeting the criteria as outlined in Roseville Electric Rule 21.												
AC E	AC Disconnect Switch: List the AC disconnect switch that will be used for this renewable energy system.											
Disco	nnect Switch Manufacturer		Disconn	Disconnect Switch Model Number				Disconnect Switch Rating (amps)				
Inverters Interconnected to Roseville Electric: List all of the inverters that will be interconnected to Roseville Electric, must be on the California Energy Commission (CEC) list of approved inverters. Use of micro-inverters will require an additional CEC approved performance display for the total installed "system".												
No.	Inverter Manufacturer	Micro- Inverter Yes/No	Inverter Model Number			Inverter Nameplate Rating DC kW (per unit)		Inverter CEC AC Rating kW (per unit)		Inverter Output Voltage		Single or Three Phase
1												
2												
a. Micro-Inverter Performance Monitoring Display The use of micro-inverters will require an additional CEC approved berformance monitoring display for the total installed PV system.  Manufacturer Name:  Location placement at customer:  Solar Equipment: List the solar/photovoltaic (PV) panel information requested below. Must be an approved PV panel listed by the California Energy Commission.												
No.	PV Panel Manufacturer	PV Pane	el Model		anel Nameplate g DC kW (per		anel CEC ating kW unit)	Quant PV Pa		I CEC-AC acity (kW)		rter Number n Above
1												
2												



# Residential Renewable Energy Application

A

**Renewable Energy Programs for Residential Customers** 

### **Required Submittal Information**

These documents are needed to ensure safe and reliable operation of Roseville Electric's Distribution System and to confirm that Customer's interconnection has been performed in accordance with Roseville Electric's tariffs and Rule 21. This is why it is important for all Customers, even those wishing for interconnection only, to submit a complete application package. **Customers should not delay sending any part of the agreement package to Roseville Electric.** 

### **Required Documents**

- 1. A completed Roseville Electric Residential Renewable Energy Application.
- 2. Shading Analysis.
- 3. CSI Standard PV Calculator Results (Download calculator at: <a href="www.csi-epbb.com">www.csi-epbb.com</a>). Values from the shading analysis must be filled in for all projects.
- 4. A single-line diagram showing Customer's actual roof top or site installation of his/her renewable energy system.
  - · The diagram must include:
    - The electrical rating and operating voltages of the significant electrical components such as the service panel.
    - The location of the visible lockable AC disconnect switch (per Roseville Electric Rule 21), inverters, all solar panels, circuit breakers and other protective devices of the renewable energy systems.
    - The general location of the Customer's loads relative to the renewable energy system, and the interconnection with Roseville Electric's Distribution System.
    - A description of how the power output from the inverter is connected to the main service panel via a branch breaker.
    - The ampere rating of this branch breaker and the main service panel breaker must be compatible with the output rating of the renewable energy system. The output rating is computed based on the total nameplate rating of the inverter.

Customer shall meet all applicable safety and performance standards established by the National Electrical Code, the Institute of Electrical and Electronics Engineers and accredited testing laboratories such as Underwriters Laboratories. A Customer with a solar generating system that meets those standards and rules shall not be required to install additional controls and/or perform or pay for additional tests.

### Metering

### **Net Metering**

 Net metering for solar generating system requires a Roseville Electric owned bi-directional revenue net meter. This meter is capable of measuring electric flow both into the meter from the Roseville Electric grid and out of the meter from the renewable energy system. If the Customer's existing meter is not a net meter, Roseville Electric must upgrade the meter to account for the bi-directional flow of electricity. The cost for this upgrade is the responsibility of the customer.

### **Meter Upgrade Cost**

 Roseville Electric will assess the suitability of the customer's meter after the customer submits an application, to determine if a net meter upgrade is necessary to gain access to Roseville Municipal Code net metering tariffs.

- If it is determined that a meter upgrade is required, per California state law, the expense of this upgrade is the responsibility of the Customer. This cost must be paid by the customer prior to gaining access to a net metering tariff and receiving any program rebate.
- Net metering upgrade cost (if applicable) will be paid as part of the project permitting process with the City of Roseville (916) 774-5332.

### Billing and Net Metering Tariffs

 Please go to the Roseville Municipal Code for complete information: <a href="http://qcode.us/codes/roseville/">http://qcode.us/codes/roseville/</a> (Section 14.24.051), or call (916)797-6937 for further assistance.



For more information please call Roseville Electric at (916) 79-POWER (797-6937)

# Residential Renewable Energy Rebate Reservation



**Renewable Energy Programs for Residential Customers** 

### Form B - To be Completed by Installer

### **Customer Information**

**General Information** 

Customer Information		
Name (as appears on electric bill)	Roseville Electric Account #	
Installation Address (street and Zip)	Telephone	E-Mail

### **Conditions for a Rebate**

### List of Required Documents to Apply for a Rebate

### **Prior to Installation**

- 1. Completed Application (forms A, B,& C)
- 2. Service Contract, Proposal or Letter of Intent to Purchase
- 3. Equipment/system warranty information
- 4. Shading Analysis
- 5. CSI Standard PV Calculator printout. Values from the shading analysis must be filled in for all projects.
  - found at: (www.csi-epbb.com)
- 6. Copy of Energy Efficiency Audit with Recommendations
  - Go to www.roseville.ca.us/EnergyAudit
- 7. A single-line diagram showing Customer's actual roof top or site installation of the renewable energy system.
  - The diagram must include
    - The electrical rating and operating voltages of the significant electrical components such as the service panel.
    - o The location of the visible lockable AC disconnect switch (per Roseville Electric Rule 21), inverters, all solar panels, circuit breakers and other protective devices of the renewable energy systems.
    - The general location of the Customer's loads relative to the renewable energy system, and the interconnection with Roseville Electric's Distribution System.
    - A description of how the power output from the inverter is connected to the main service panel via a branch breaker.
    - The ampere rating of this branch breaker and the main service panel breaker must be compatible with the output rating of the renewable energy system. The output rating is computed based on the total nameplate rating of the inverter.

### **After Installation**

- 1. Copy of "Residential Energy Installation Certificate" (form D)
- 2. Copy of "Payment Request" (form E)
- 3. Paid in full invoice



# Residential Renewable Energy Rebate Reservation



**Renewable Energy Programs for Residential Customers** 

### **Energy Efficiency and Rebate Requirements**

State mandated energy efficiency requirements may be found in the Roseville Electric Program Handbook at:

- o <u>www.roseville.ca.us/Solar</u>
- o www.gosolarcalifornia.ca.gov/documents/csi.php
- Per California state law, an energy efficiency assessment/audit is a part of every net metered solar project installed statewide where an electric utility rebate is paid.
- Additionally, per California state law, the installation of energy efficiency measures is mandated in some cases as part of every net metered solar project installed statewide where an electric utility rebate is paid.
- The required energy efficiency actions vary per California state law by customer type. Rebates will not be paid until ALL requirements are met.

It is the customer's responsibility to read and understand the state mandated energy efficiency requirements specific to their electric customer type. If the customer has any questions regarding energy efficiency, they should contact Roseville Electric.

### **Rebate Calculation**

Expected Performance Based Incentive (EPBI)	Enter data in this column
ENTER: Results - CSI AC System Size (kW) from Calculator at: www.csi-epbb.com	
Roseville Electric Incentive Rate (\$ per AC Watt) (See Roseville Electric Program Handbook and call Roseville Electric for more information)	\$.48
REBATE CALCULATION: A X B	

## **Getting Paid a Rebate**

Once the system has been installed and all program criteria have been met, the Customer must apply for the previously reserved rebate amount to receive payment. It is the obligation of the customer to meet all program requirements, obtain all necessary City inspections, gather all necessary documents and submit this package with a Request for Payment (form E) to Roseville Electric for any rebate payment. All rebate reservations must be confirmed in advance and in writing by Roseville Electric – no exceptions. All program costs must be paid in full by the Customer prior to any rebate payment.

### List of Required Documents Needed to Receive a Rebate

- 1. Submit Request for Payment (form E) to Roseville Electric
  - If system changes have occurred
    - o They must be listed in this document
    - o If changes have occurred, at new CSI model and single-line drawing must be included
  - It is advised that any system changes are submitted to Roseville Electric as soon as possible. System changes
    may change rebate amounts.
- 2. Obtain an "approved" City of Roseville Final Building Inspection
- 3. Contractor submits the Installation Certificate (form D) to Roseville Electric





**Renewable Energy Programs for Residential Customers** 

### Form C - Mandatory - To be completed by Roseville Electric Customer

IMPORTANT NOTE: Applicant must complete this form and meet all energy efficiency requirements per California State law Senate Bill (SB) 1.

By installing all cost effective energy efficiency measures before installing a solar electric system, the owner can lower the overall size and cost of the system and reduce monthly energy bills.

**Initial in each box, fill in the blanks and sign below**. Submit this form and a copy of the energy audit along with the Roseville Electric Renewable Energy Application.

Disclosi	ure		

Initial		Description			
	Name:	Address:			
	Electric. (U	Owner of the home and have reviewed my available 12 months of energy usage from Roseville Usage can be obtained at: <a href="www.roseville.ca.us/EnergyAudit">www.roseville.ca.us/EnergyAudit</a> You must enter your Roseville Electric bunt number.  I energy usage is:kWh			
	energy effi	following services and/or tools to learn about how I could save money with conservation and other iciency measures that could be installed at my home.  must visit All Roseville Electric Web Links, check the box to show completion:  Energy Efficiency Rebates - www.roseville.ca.us/Rebates			
		Reduce Energy Use - www.roseville.ca.us/SaveEnergy			
		Lower My Bill - www.roseville.ca.us/LowerMyBill			
	Applicant i	must visit All Third Party Web Links, check the box to show completion:			
		Energy Star Appliances - www.energystar.gov			
		American Council for an Energy Efficient Economy - www.aceee.org			
		California Go Solar - www.gosolarcalifornia.org			





Renewable Energy Programs for Residential Customers

 I had an energy efficiency audit completed on the home or I have completed a self-guided energy assessment of my home that identified cost effective energy efficiency improvements. To access the online audit, go to: <a href="https://www.roseville.ca.us/EnergyAudit">www.roseville.ca.us/EnergyAudit</a> (Online Home Energy Assessment)
Prior to investing in renewable energy system I installed the following energy saving measures in my home:
I intend to install the following energy efficiency measures on my home:  by: (date)
 I have read and understand the terms set forth in the Roseville Electric Residential Renewable Energy Appliction for system interconnection with Roseville Electric.
The Contractor listed in the Roseville Electric Residential Renewable Energy Application (Form A) is authorized by the Customer to receive confidential Customer information regarding Customer account billing and Customer electric usage pertaining to this installation.  By checking the boxes above and signing this agreement, Customer authorizes Roseville Electric to release information to the contact(s) named above regarding Customer's usage and billing information, renewable energy system location, size and operational characteristics as requested in the course of this interconnection process. Roseville Electric is granted permission to share information with authorized recipients for a period of three years from the date this agreement is received by Roseville Electric. In addition, Customer authorizes Roseville Electric to release to the California Energy Commission information regarding Customer's facility size and operational characteristics (excluding customer name, contact information, other personal information and renewable energy system location) as requested from time to time pursuant to the California Energy Commission's rules and regulations.



C

**Renewable Energy Programs for Residential Customers** 

### General Requirements for System Interconnection & Access to Net Metering Tariffs

### Rule 21: Roseville Electric Requirements for Interconnection and Access to Net Metering Tariffs

It is recommended that all applicants and their contractors obtain copy of Roseville Electric's Rule 21 from Roseville Electric's web site (<a href="www.roseville.ca.us/Rule21">www.roseville.ca.us/Rule21</a>), read and understand all interconnection requirements. Failure to abide by these requirements could result in a delay in interconnection and payment of any rebate. All systems installed in parallel to Roseville Electric's distribution grid must meet these requirements.

### 1. Access to Roseville Municipal Code Customer-owned solar electric generation rates.

- Per Roseville Municipal Code, access to the rate is conditioned upon the Customer meeting all Rule 21
  equipment and operational standards.
- Failure to meeting and/or maintaining Rule 21 equipment and operational standards may result in the loss of access to solar net metering.

### 2. Permission to Interconnect

- <u>Customers must not operate their renewable energy system in parallel with Roseville Electric's</u>
   <u>Distribution System until they receive written authorization for Parallel Operation from Roseville</u>
   <u>Electric.</u> Unauthorized Parallel Operation could result in injury to persons and/or damage to equipment and/or property for which the Customer may be liable.
- Safe Operation of your renewable energy system: Notwithstanding any other provision of this Application, if at any time Roseville Electric determines that either (a) the Customer's Facility, or its operation, may endanger Roseville Electric personnel, or (b) the continued operation of the Customer's Facility may endanger the safe and reliable operation of Roseville Electric's electrical system, Roseville Electric shall have the right to disconnect the renewable energy system from Roseville Electric's system. Customer's renewable energy system shall remain disconnected until such time as Roseville Electric is satisfied that the unsafe condition(s) have been corrected.

### 3. Meter Access

Your meter must remain unobstructed by locked gates or pets. Additionally, meter access must be maintained at
all times for meter reading and system maintenance. Any animals owned by the customer, including pet dogs,
should not have access to these areas to avoid hindering Roseville Electric service personnel, preventing them
from completing their work.

### 4. Document and Cost Requirements

Other Documents and/or Costs may be required and there may be requirements for interconnection in addition to
the above list, depending on the specifics of the planned Generating Facility. Other approvals and/or other
agreements may be needed for special Roseville Electric programs or regulatory agency requirements.



C

**Renewable Energy Programs for Residential Customers** 

### **Interconnection Agreement**

### **Terms and Conditions**

Each of the undersigned declares under penalty of perjury that:

- The Applicant has read and understood the program requirements set forth in the Application (Form [A]) and has agreed to abide by those requirements.
- The information provided in this form is true and correct to the best of his or her knowledge.
- The above described generating system is intended primarily to offset part or all of the Applicant's electrical needs at the site of installation.
- If a rebate paid, the Applicant understands that the specified system must be mounted permanently and remain in operation in Roseville for no fewer than 10 years.
- The site installation is located within the service territory of Roseville Electric.
- The Applicant understands that program funds are limited, reservations are required and that rebates are available on a first-come-first-served basis.
- The Applicant understands that program funds are not reserved until the solar electric buy down program
  reservation form from Roseville Electric is received by the Applicant. If the Applicant has authorized their
  Retailer/Installer to submit their rebate package to Roseville Electric, the Applicant understands that program
  funds are not guaranteed until a reservation is issued.
- The Applicant agrees that the selection, purchase, and ownership of the equipment are his or her sole responsibility. Roseville Electric makes no representation as to the safety, reliability, and/or efficiency of the equipment selected or components thereof.
- The Applicant acknowledges that Roseville Electric is not responsible for any taxes that may be imposed as a result of any financial rebates from Roseville Electric.
- Roseville Electric makes no warranty, whether expressed or implied, including warranty of merchantability of fitness for any particular purpose, use, or application of the equipment.

# Customer Name Customer Signature Applicant Name (if Other than Purchaser): Applicant Signature Customer Address Number of panels

When approved & signed by Roseville Electric this form authorizes the actuation of the solar generation system

Roseville Electric use only	
RE Program Representative - Print	
RE Program Representative - Signature	
Date Approved:	
FINAL CSI:	

