



# SOLAR ENERGY, Interconnection Application

The Colorado Springs Utilities (“Springs Utilities”) Solar Energy (SE), Interconnection Application (“Application”) form is used to apply for interconnection and/or net metering for a solar energy system (“System”) under the Solar Energy, Non-Rebate Net Metering Program, or Small Power Producer Program. The form specifies information about the System to be installed to validate that the System meets program requirements. At the time of submission, the Customer will be billed the applicable solar application fee, as established in Springs Utilities’ Utilities Rules and Regulations. The Customer agrees to pay the application fee, as added to the utility bill. The residential and small commercial Customer application fee is \$100; and the large commercial Customer application fee is \$1000. Large commercial systems sized 150kW AC and above will be assessed the “large commercial” fee. If the Application form is approved, an approval letter will be emailed to the Customer, Installer and Pikes Peak Regional Building Department. If the Application form is denied, a denial email indicating the reason for denial will be emailed to the Customer and Installer.

Customers or Installers can expect to receive an Approval or a Denial email. The approval email should be used for permitting purposes at Pikes Peak Regional Building Department.

## Section 1: Customer information

“Customer” is defined as an individual or business that purchases retail electric service on a residential, commercial, or industrial tariff from Springs Utilities, owns the installation premise, and maintains Springs Utilities electric account (s). “System” is defined as a solar photovoltaic system consisting of photovoltaic modules, an inverter or microinverters, an AC disconnect, and a protective device or breaker meeting the system design specifications in Section 3 of the Interconnection Agreement.

## Section 2: Designer/Installer information

Check the box indicating whether the System is to be installed by the Customer (self-install) or a hired contractor. If a self-install, leave the rest of the section blank. If installed by a contractor, check the box indicating who the primary contact should be for questions and correspondence. Note: Systems installed by a third-party contractor must carry a minimum five (5) year warranty on the workmanship of the installation, per the Program Terms and Conditions below.

## Section 3: Solar photovoltaic system and installation information

Complete all specification fields describing the solar system. Equipment details and Photovoltaic Test Conditions, PTC, ratings found at [Solar Equipment Lists | California Energy Commission](#) must be included. All fields must be completed for processing the Interconnection Application form.

## Required documentation.

In addition to the Application, the following documents are required to be submitted: building shade analysis report, site plan showing all solar and meter equipment locations and listing the production socket model, electrical line diagram, two photographs of the revenue meter: showing measured height of meter face from grade and wide-angle photo with minimum 3-foot radius, completed/ signed net metering agreement, and equipment specification sheets. A checklist for submission requirements is online at: <https://www.csu.org/Documents/SolarApplicationPacketChecklist.pdf>

## Acceptance or Terms and Conditions

The customer consents to and agrees to pay the applicable application fee by signing this Application. A signature and date are required of all applicants.

**TERMS AND CONDITIONS**

**1. Definitions:**

- a) **Customer** – An individual or business that purchases retail electric service on a residential, commercial, or industrial tariff from Springs Utilities, owns the installation premise, and maintains Springs Utilities electric account(s).
- b) **Installer** – An individual or company installing the System with the Customer’s consent to represent he Customer. Responsible to collect and verify, according to program rules, the necessary identification, documentation, and information to properly represent the customer.
- c) **Interconnection Agreement** –A Net Metering Agreement or Small Power Producer Interconnection Agreement.
- d) **System** – A solar photovoltaic system consisting of photovoltaic modules, an inverter or microinverters, an AC disconnect, and a protective device or breaker meeting the system design specifications in Section 3 of the Interconnection Agreement.
- e) **Operational** – A System is defined as operational if it is continuously producing energy, as read monthly at Springs Utilities’ Renewable Energy Credit (REC) meter. A System is considered “non-operational” if the REC meter reads zero energy production over a period of three (3) or more consecutive months.
- f) **Submittal Deadlines** – Applications will be accepted throughout the calendar year.

**2. Qualifying Systems installed under the Solar Energy program must:**

- a) Be included in the List of Eligible Photovoltaic Modules found at [Solar Equipment Lists | California Energy Commission](#) and the List of Eligible Inverters/Microinverters found at [Solar Equipment Lists | California Energy Commission](#). Inverters/microinverters must also meet Pikes Peak Regional Building Department Arc Fault requirements.
- b) Be interconnected with Springs Utilities electric system under an authorized Interconnection Agreement.
- c) Comply with the system design as laid out in the current “Electric Line Extension and Service Standards” manual.
- d) Be installed at a premise owned by the Customer and receiving Springs Utilities electric service, or in the case of new construction, at a premise titled in the Customer’s name.
- e) Have a minimum System size of five hundred (500) watts, and a maximum System size of fifteen (15) kilowatts for residential and one hundred (100) kilowatts for business; new system size must not exceed one hundred twenty (120) percent of customer’s previous twelve (12) month kilowatt-hour usage at the single premise meter where the System will be interconnected.
- f) Be for personal use only, NOT FOR RESALE.
- g) Carry manufacturer and/or Installer warranties for the following minimum specified period(s) as appropriate for the product installed, from the date of completion of the work. The warranty includes all materials, parts, service calls and labor for the period(s) as appropriated for the product installed.
  - 1. **System** – five (5) years against defects in workmanship. Installer must provide warranty unless System installed by Customer.
  - 2. **Inverter** – five (5) years against manufacturer defects. Manufacturer must provide warranty.

**3. Photovoltaic (PV) modules (panels) – Must be warrantied for twenty (20) years against degradation of performance below eighty (80) percent of original output under standard test conditions (STC). Manufacturer must provide warranty.**

**4. Qualifying Systems must NOT be:**

- a) installed prior to submitting a Net Metering/Interconnection Application form and receiving an approval.
- b) interconnected prior to final Pikes Peak Regional Building (PPRBD) final electric service (ES) inspection completion and meter installation.

**5. Required documentation:**

Incomplete Interconnection Application form(s) or those lacking the additional required documentation (listed on page one, ‘Required documentation’) will be denied.

**6. Customer Responsibility:**

Customer is solely responsible for installation of all equipment/products to the manufacturer’s specifications. Customer is solely responsible for obtaining related building permits and completing the Electric Service (ES) inspection process as required by local authorized jurisdiction. Customer is responsible for having the system completed within a 12-month period from initial application or providing communication requesting extension of the application prior to expiration period in 12 months. The failure to complete in this period will require a new application from the Customer. Once the system has passed ‘ES’ permit final inspection from PPRBD and the information is uploaded, orders will be created to schedule the Springs Utilities meter installation.

**7. Installation Inspection:**

Customer agrees that Springs Utilities reserves the right to inspect the installation premise at any time.

**8. Springs Utilities is not a party:**

The Customer understands and agrees that Springs Utilities is not a party to any contract pertaining to the System installation. The



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Customer agrees to indemnify, to defend, and to hold harmless Springs Utilities, its board members, officers, agents and employees against all claims, loss, damage, expense and liability asserted or incurred by other parties, including but not limited to Springs Utilities' employees, arising out of or in any way connected with the Solar Energy, the Interconnection Agreement, and the System, or the System's installation, operation or performance, and caused by acts, omissions, intent or negligence, whether active or passive, of Customer, its agents, employees, and suppliers, and excepting only such loss, damage or liability as may be caused by the intentional act or sole negligence of Springs Utilities.

**9. Disclaimer of warranties:**

Springs Utilities makes no representations or warranties, expressed or implied, regarding the design, sizing, installation, construction, reliability, efficiency, performance, operation, maintenance, or use of any System or any make or model of equipment analyzed, discussed, selected, rejected, installed, or otherwise considered by the Customer. Any decisions regarding the selection, design, installation, use and operation of Systems and equipment shall be at the sole discretion and are the sole responsibility of the Customer. Springs Utilities is not liable or responsible for any act or omission of any contractor whatsoever.

**10. System Size:**

Systems must comply with all requirements of the current Renewable Energy Net Metering Tariff or Small Power Producers and Cogeneration Service Tariff.

**11. Subject to Change:**

This program is subject to change and/or discontinuation without notice.

**12. Right to Deny:**

Customer agrees that Springs Utilities reserves the right to deny an Application if the proposed PV System would require modification to existing Springs Utilities facilities or equipment.



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## APPLICATION SUBMISSION

Please complete this form, read the Program Terms and Conditions above, **initial** each page, **sign** the Acceptance affirming your agreement with the Terms and Conditions, attach the required supporting documentation, and submit all documents as separate attachments to the email address: [renewables@csu.org](mailto:renewables@csu.org)

### 1. CUSTOMER INFORMATION

Account Name: \_\_\_\_\_ Utility Account #: \_\_\_\_\_  
(Authorized person on the account) (For the installation address)

Meter Number: \_\_\_\_\_  
(Existing electric service meter for planned solar installation)

Installation Address: \_\_\_\_\_ Zip: \_\_\_\_\_

Customer Email Address: \_\_\_\_\_  
(As listed on the account)

Mailing address: \_\_\_\_\_ City: \_\_\_\_\_ Zip: \_\_\_\_\_  
(If different from installation address above)

**ELECTRIC VEHICLE (EV) (optional):**  
I would like my newly, registered EV considered to increase my total annual energy consumption. The EV has been registered within the last 11 months. I am providing my current EV vehicle registration with documentation attached and details below:

**Purchase of electric vehicle within previous 11 months (Please check one):** Yes  No

Vehicle registration date: \_\_\_\_\_

### 2. DESIGNER/INSTALLER INFORMATION

Please check one: Contractor (Company): \_\_\_\_\_ **OR** Self (customer)

Fill out the following only if contractor is selected:

Representative: \_\_\_\_\_ Email: \_\_\_\_\_

Contact Phone: \_\_\_\_\_

### 3. SOLAR PHOTOVOLTAIC (system) AND INSTALLATION INFORMATION (Please include specification sheets with submission package)

**Service type (check one):** Residential: \_\_\_\_\_  
Commercial: \_\_\_\_\_

**Energy storage system ONLY** installation **skip** PV Module and Inverter/Microinverter. Provide the energy storage system, ESS, specification sheet.

**PV System Information:** (from [Solar Equipment Lists | California Energy Commission](#)) Included on the site plans:

System equipment listed and verified as found in the solar equipment CEC listing above.

Panel Manufacturer: \_\_\_\_\_ Panel Model Number: \_\_\_\_\_

Number of Inverters/Microinverters: \_\_\_\_\_

Inverter/Microinverter Manufacturer: \_\_\_\_\_ Inverter/Microinverter Model Number(s): \_\_\_\_\_

**PV System Information:** (NOT from [Solar Equipment Lists | California Energy Commission](#))

Production meter socket model number: \_\_\_\_\_



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**Energy storage system, ESS** (if installing, this section must be completed)      Number of ESS(s): \_\_\_\_\_

ESS Manufacturer: \_\_\_\_\_      ESS Model Number: \_\_\_\_\_

ESS Total Size: \_\_\_\_\_ kWh      ESS Maximum Capacity: \_\_\_\_\_ kW

**Height of center of billing meter from grade** (Standards requirement height 60-72 inches from grade): \_\_\_\_\_

Note on the site plans the relocation height and details falling within standards if the meter height is outside of standards.

**Overhead mast distance to nearest panel will be greater than 3 feet** (Please check one):      Yes      No      N/A

**Clearance from Gas Regulator Vent to sources of ignition is greater than 3 feet** (Please check one):      Yes      No      N/A  
(Including meter sockets, panel, and photovoltaic system equipment, etc.)

**ARRAY TABLE** (arrays are defined by the following specifications) **Do not include existing panels for system additions:**

If the system has additional arrays attach a table with those listed:

	Array 1	Array 2	Array 3	Array 4	Array 5	Array 6	Sample
<b>A) Panel PTC Rating</b>							222.8
<b>B) Number of panels to be installed</b>							4
Panel orientation (from <b>table below</b> )							180
Panel tilt (round to <b>table numbers</b> )							18
<b>C) De-rating factor</b> (from <b>table below</b> )							0.96
<b>D) Annual solar access</b> % (this is not TSRF)							1.00
<b>E) Inverter Efficiency Rating</b>							0.99
<b>Total AC Watts output</b> (multiply <b>AxBxCxDxE</b> )							847

**Solar report required** and solar access included on row D.

Systems are limited to **120% or 15ACKW** for residential and 100ACKW for commercial, whichever is less. Prior to submitting the application verify system sizing with the residential calculator and customer's usage:

<https://www.csu.org/Documents/Colorado%20Springs%20Utilities%20Residential%20Solar%20Calculator.xlsx>

**Notes on AC watt calculation:**

C) De-rating factor for combinations of orientation and tilt are found in the table below.

D) De-rating factor for shading is provided by shade report (or solar access device) readings taken at the installation site.

		PV Array Tilt Angle from Horizontal (Degrees)						De-rating Factor (C)
Orientation	Degrees	0	18	30	45	60	90	
N	0	0.83	0.65	0.53	0.40	0.30	0.22	
NNE	22.5	0.83	0.67	0.56	0.44	0.35	0.26	
NE	45	0.83	0.72	0.68	0.47	0.38	0.29	
ENE	67.5	0.83	0.77	0.72	0.66	0.59	0.45	
E	90	0.83	0.83	0.81	0.77	0.71	0.55	
ESE	112.5	0.83	0.89	0.89	0.87	0.82	0.63	
SE	135	0.83	0.93	0.96	0.95	0.89	0.68	
SSE	157.5	0.83	0.95	0.99	0.99	0.94	0.70	
S	180	0.83	0.96	1.00	1.00	0.95	0.70	
SSW	202.5	0.83	0.95	0.99	0.99	0.94	0.70	
SW	225	0.83	0.91	0.93	0.91	0.86	0.65	
WSW	247.5	0.83	0.86	0.86	0.83	0.77	0.59	
W	270	0.83	0.81	0.77	0.72	0.66	0.51	
WNW	292.5	0.83	0.75	0.68	0.60	0.53	0.41	
NW	315	0.83	0.69	0.59	0.49	0.41	0.31	
NNW	337.5	0.83	0.66	0.54	0.41	0.32	0.25	



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## ACCEPTANCE OF TERMS AND CONDITIONS (required for all)

Customer is required to initial all pages of this Application and sign below which certifies under penalty of perjury that:

- a) The information provided in this form is true and correct to the best of the Customer’s knowledge.
- b) The Customer has read and understood the stated Solar Energy program terms and conditions.
- c) The Customer agrees to comply with all provisions of the Solar Energy program and the Interconnection Agreement.
- d) The Customer agrees to pay the application fee of \$100 for residential and \$1000 for large (150kWAC or large) commercial applications.
- e) The third-party/developer is also required to initial all pages of this Application which certifies under penalty of perjury that the third party/developer has read, understood, and agrees to the stated Solar Energy Program Instructions and Terms and Conditions.

Customer Name (please print): \_\_\_\_\_

**Signature Required:** \_\_\_\_\_ **Date:** \_\_\_\_\_

Please complete this Application form, attach the required documents, and submit to:

Colorado Springs Utilities  
 Solar Energy Program  
 PO Box 1103, Mail Code 1339 Colorado  
 Springs, CO 80947-1339

OR

Email to [renewables@csu.org](mailto:renewables@csu.org)