Own your own power generation – protect the environment

Colorado Springs Utilities ("Springs Utilities") is a committed environmentally friendly utility. Bringing clean, renewable energy to our community is everyone’s responsibility. We want to help you do your part. Solar electric panels, or photovoltaics ("PV"), convert the renewable energy of the sun into useful electricity that is pollution-free and avoids burning fossil fuels.

The Renewable Energy Rebate Program ("RERP") supports and encourages customers to install solar PV generating systems at their homes and businesses, which helps protect the environment, diversifies our energy supply, creates energy independence and reduces our summer peak capacity requirements.

PROGRAM GOALS

The RERP was launched with the following objectives:

- Support the intent of Amendment 37, a state law mandating utilities to increase renewable energy supply, now known as the Colorado Renewable Energy Standard
- Provide customer-side renewable energy solutions, in response to moderate customer demand
- Support renewable energy market development in our community
- Increase participation in the Renewable Energy Net Metering Program (see details on the following page)
- Gain experience with small-scale and distributed renewable energy systems; and
- Demonstrate environmental stewardship.

SOLAR BASICS

The RERP is designed to encourage solar installations that are connected to the electricity system, or grid.

Grid-tied solar systems rely on power conditioning equipment, or inverters, to convert the direct current ("DC") electricity produced by the solar panels, or modules, into alternating current (AC) electricity, which is delivered throughout the grid. Here is how a grid-tied system works:

Several PV modules are wired together in a string or multiple strings to create a PV array (see figure below). The PV modules convert solar radiation into DC electricity, which is fed into the inverter(s) and converted to AC electricity. AC electricity from the system is delivered to the main panel where it is used by appliances in the house, any excess is supplied to the grid through the utility meter interconnection.

We provide rebates for this AC power output. Some customers may wish to retain Renewable Energy Credits for the solar PV they install. No rebate is paid in this instance.

The average size of a residential PV system is four (4) kilowatts AC. A properly designed, four (4)-kilowatt AC system will produce enough power to offset nearly all a typical residential customer’s annual electricity consumption.

NET METERING

When customers participate in the Renewable Energy Net Metering tariff, they can receive full credit for the energy produced. A utility meter records the difference between energy produced and consumed (i.e., generation from the PV system offsets retail electricity consumption), and the customer is billed for net consumption, or credited for net generation. The credited energy is carried over, month-to-month, and can be used whenever consumption exceeds generation. Net metering is a significant advantage that increases the value of PV to the customer. To learn more about net metering, see Sheet No. 34 of our tariffs at http://www.csu.org/CSUDocuments/tariffelec.pdf.
2020 Renewable Energy Rebate Program
Fact Sheet

CALCULATION OF SYSTEM SIZE AND REBATE PAYMENT

Because quality assurance is important, we have designed the RERP to encourage participating customers to design their PV systems for optimum performance. Several factors can degrade system performance from the optimum level. Rebate payments are based on expected power output in AC watts (rather than on the capacity rating of the array in DC watts). To calculate AC use the formula and table provided on the current application form.

PHASES OF PARTICIPATION

1. Installer (or customer) completes the system design and submits a Net Metering/Reservation Request Application (application), a Utility Approval Review Package (Plan Set), a copy of applicable identification for the Affidavit of lawful Presence, a copy of the shading analysis, a wide-angle picture of the existing meter, and a signed Interconnection Agreement for Renewable Energy Net Metering and signed installation contract.

2. Springs Utilities reviews the customer application. If the application is approved, funds are reserved, and a Reservation Confirmation email is dated and sent to the installer and PPRBD. If the application is denied, a Denial email is sent, including the reason(s) for denial. If funds are unavailable, applications will be placed on a wait list in the order they are received, or will be approved for Non-Rebate Net Metering upon the customer’s request.

3. Customer must complete the installation and submit an Installation Verification (IV) form by the Reservation Expiration (RE) Deadline, one hundred twenty (120) days from the Reservation Confirmation date, or the reservation will expire. Funds liberated due to voided or expired reservations will go to the next customer on the wait list. If the reservation was voided or expired due to circumstances out of the customer’s control, and the customer wishes to retain the reservation, the customer must submit a Time Extension (TE) Request form by the TE Deadline. TE forms will be reviewed and approved or denied at Springs Utilities’ sole discretion. Time Extensions will be limited to thirty (30) days. If, for whatever reason, the Installation Verification cannot be completed within the one hundred twenty (120) day window, the customer may reapply with a new Net Metering and Rebate Reservation form. Applications and resubmissions will always be approved on a first come, first served basis. Rebates will be paid at the going rate at the time of interconnection (meter replacement).

4. Installer purchases all necessary permits from Pikes Peak Regional Building Department (PPRBD), installs and completes permit inspections.

5. Upon inspection and approval of Electric Service (ES) permit by PPRBD, Springs Utilities is notified of approval for Net Meter installation.

6. Meter installation is coordinated and usually undertaken within 5-8 business days.

7. Springs Utilities reviews the IV form, approves the interconnection of the System and provides a Permission To Operate (PTO) to the installer.

8. Springs Utilities calculates and approves the final rebate amount from the IV. Rebates are paid in the form of a check within sixty (60) days of interconnection. For the rebate to be paid, the IV form must be received and approved, and Exhibit B (internal Utilities interconnection document) must be received and processed by the RERP Manager.

Submittal deadlines and dates

<table>
<thead>
<tr>
<th>Progress Point</th>
<th>Deadline</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Installation Verification (IV) Form</td>
<td>Reservation Expiration Deadline</td>
<td>One hundred twenty (120) days from the Reservation Confirmation Date and prior to Interconnection Inspection</td>
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<tr>
<td>Time Extension (TE) Request Form (if applicable)</td>
<td>TE Deadline</td>
<td>Reservation Expiration Deadline</td>
</tr>
<tr>
<td>Interconnection (Meter Replacement)</td>
<td>Rebate paid at current year rate</td>
<td>Within reservation deadline</td>
</tr>
</tbody>
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2020 Renewable Energy Rebate Program for Photovoltaics Process Flow

Customer seeks multiple quotes from solar installer

Customer selects preferred installer to build system

Installer completes design and submits all documentation to Renewables@csu.org

Colorado Springs Utilities reviews application for completeness and technical standard adherence

Approval email sent to installer and PPRBD

Installer obtains permits from PPRBD and constructs system

Final permitting by PPRBD

PPRBD informs Utilities that system complete

Utilities installs Net Meter to track solar generation

Permission to Operate, signed and issued to installer and customer

SYSTEM CAN BE ENERGIZED

Installer sends final documents to Utilities

Utilities marks system for rebate

Customer sends in rollover credit election form to Utilities

SPRINGS UTILITIES RECOMMENDATIONS
Self-Education
Before requesting bids from solar contractors, Springs Utilities recommends educating yourself about how solar works, the different solar options available (i.e. battery storage) and the benefits of using different types of equipment (i.e. string vs micro vs power optimizer inverters).

Identify Your Objectives
Solar has the potential to provide many benefits, but not everyone pursues solar for the same reasons. Knowing what you want to get out of a solar project is an essential step before reaching out to installers for proposals. For instance:

- Do you want to install solar to increase your energy independence?
- Do you want to install solar to save money?
- Do you want to install solar to do your part for the environment?
- Do you want to install solar to stay on the cutting edge of technology?
- Do you have tax credit/tax haven goals for the year?
- Do you need to meet renewable energy targets for your organization?
- Will solar help you with branding or marketing? Will it help you tell your story?

Qualified installers
If photovoltaic systems are not properly designed and installed, they may perform below expectations and produce less energy. Additionally, poorly/improperly installed systems can cause inspection delays and unnecessary complications. **Colorado Spring Utilities recommends that customers obtain at least three bids from separate installers.** We recommend researching installer reviews online, and thoroughly vetting installers over the phone before requesting a bid. Springs Utilities does not partner with or recommend any installer, but many installers in Colorado Springs and the surrounding area are very experienced working with the Spring Utilities Renewable Energy Program. Springs Utilities appreciates the economic benefit of a growing renewable energy sector within the service territory and warmly welcomes application submissions from new installers.

Site Surveys
Springs Utilities recommends that customers request a site survey from each installer providing a proposal. Many aspects of a solar installation cannot be appropriately assessed or determined remotely, and have significant impact on system design, compliance and cost. Most installers perform free site surveys as part of their bidding process. Items that should be assessed with a site survey:

- Electrical set up/electrical plan
- Placement of components, such as inverter(s), meters, disconnect(s)
- Actual roof or site measurements
- Actual production potential
- Condition of roof or site
- Structural condition of your house or building

Energy efficiency first
We recommend that customers make cost-effective energy efficiency upgrades of lighting, appliances, insulation and electronics prior to PV installation. This ensures that you get the most out of your investment. Visit [https://www.csu.org/Pages/residential.aspx](https://www.csu.org/Pages/residential.aspx), and select WAYS TO SAVE to find out about Springs Utilities’ efficiency rebates and other energy solutions for your home or business.

**PROGRAM REQUIREMENTS**

Requirements for participation in this program as specified on the current application form, and include what documentation is needed for approval and details of equipment that can be interconnected to the utility grid.

Applications can be found at [www.CSU.org](http://www.CSU.org) under Ways to Save.