

## Solar\*Rewards® Frequently Asked Questions

- 1. Will a PV system work with my home?
- 2. Am I eligible to participate in the Solar\*Rewards program?
- 3. What size system should I get?
- 4. What is the limit for a system size in relation to customer usage?
- 5. I recently purchased an electric vehicle (EV); can I size the PV array to include this?
- 6. <u>How can I obtain access to bill history or data usage</u> information for an account?
- 7. What is the limit for a system size for new construction?
- 8. What is required for proof of square footage?
- 9. How can I calculate the PV Watts estimated annual output of an array that is smaller than .5 kW?

### Application process

- 10. Can I submit an application if I only have a temporary meter?
- 11. What is the Application Deposit?
- 12. Can I drop off my Application Deposit to the Xcel Energy offices?
- 13. What is the Interconnection Study Fee?
- 14. What is the NABCEP Form and why is it required?
- 15. <u>Can I change the size of my system during the</u> application process?
- 16. <u>Can I change the equipment/hardware during the</u> application process?
- 17. How long do I have to complete my installation?
- 18. Can I apply for an extension?

### **Program Rules and Requirements**

19. <u>Can I install PV on a building's roof and back feed another</u> separately metered building?

- 20. Can I install plug-in solar panels on my home?
- 21. Can I build a solar farm and sell the energy back to Xcel Energy?
- 22. Is there a list of equipment that is eligible through the Solar\*Rewards program?
- 23. Can I change installers or developers?
- 24. Can you recommend an installer?
- 25. Why does Xcel Energy need proof of insurance?
- 26. Why does Xcel Energy need to be listed as additionally insured?
- 27. If I live in a condo or townhouse will I need approval from my homeowners association?
- 28. <u>Can I move my solar system to a different address if I move</u> or buy another home?
- 29. What happens if I sell my house during the 20-year contract period?
- 30. I purchased a home (or lot) that is currently being built. I am also purchasing a solar system that will be installed on the new home. I do not have an Xcel Energy account yet, how can I apply for Solar\*Rewards?
- 31. What is the Interconnection Agreement?
- 32. What is the definition of a contiguous site and how is it relevant to Solar\*Rewards?
- 33. What are the options for my excess generation or Solar Bank credits?
- 34. <u>How is the Average Hourly Incremental Cost of Energy</u> <u>determined?</u>
- 35. <u>Can I install a PV system and not participate in the</u> <u>Solar\*Rewards program?</u>
- 36. When can I turn on my PV system?
- 37. Do you provide data on participation in the Solar\*Rewards program?



#### Incentives

- 38. Can I assign my REC payments to an alternate recipient?
- 39. How do the REC payments work?
- 40. How are REC payments made?
- 41. Does Xcel Energy issue 1099s?

### **Metering and Billing**

- 42. Can I run my PV system before a net meter is installed?
- 43. Do I need to be connected to the grid?
- 44. Why is an AC Disconnect required?
- 45. How much electricity will my PV system produce?
- 46. How much energy is my PV system producing?
- 47. What is a PV production meter?
- 48. <u>How do the summer Tiered Rates affect my bill if I am a</u> Solar\*Rewards Customer?
- 49. Can I participate in Solar\*Rewards if I am on a special rate plan (Time of Use Pricing, Peak Demand Pricing, etc.)?
- 50. What does RESA stand for and how is it used?



## System Size and Customer Usage

### 1. Will a PV system work with my home?

To have a PV system installed on your roof, your property must have a reasonable amount of non-shaded, unobstructed roof space during the key sun hours of the day. A southern orientation is ideal, but east- and west- facing roofs can still capture a portion of the power of a true south-facing roof. Your roof can be flat or sloped. Rack-mounted systems on the ground are also an option.

### 2. Am I eligible to participate in the Solar\*Rewards program?

Please review the <u>Candidate Checklist</u> in order to determine your eligibility. Mobile homes are not eligible to participate in the Solar\*Rewards Program.

However, mobile homes may be eligible to participate in our non-incentivized DG solar program provided they have permanent services and the system is ground mounted. Please refer to FAQ #10 for additional information on temporary services. Please refer to FAQ #19 for additional information on Ground Mounted Arrays. Roof top mounted systems are not permitted on mobile homes.

### 3. What size system should I get?

The size you choose is a tradeoff between the amount of money you want to invest and the amount of electricity you want to produce. A fairly large home during peak electricity usage in the summer uses up to 5 kW of electricity at any given moment. Over a year, that same home will use approximately 12,000 kWh of electricity. You can look at your past bills to calculate how much electricity your home typically uses and determine what percentage you want to cover with solar electricity.

The amount of suitable space available on your roof is also something to consider. To be suitable, it must be unobstructed and not shaded, either flat or sloped, at an orientation other than north. You need roughly 120 square feet of roof space for each kilowatt of PV capacity you wish to install.

# 4. What is the limit for a system size in relation to customer usage?

When it comes to designing a PV system for any residential or commercial system, the 120% rule is used to determine the limit to how much a building or structure can hold or how much energy the site's service can handle. This rule is meant to calculate how many amps can be backfed through the load side of the site's existing service equipment with a measure of safety.



Every application is checked for the 120% rule. For all programs, the annual power output (kWh) of a PV system can be no greater than 120% of the total customer usage from the previous 12 months. Any applications that come in over the 120% rule will be declined and asked to adjust system size accordingly.

Please see FAQ #15 for additional details on system size changes.

We calculate this at the time of application review by using the previous 12 months of usage. If 12 months of usage is not available, then we will use the average of the available months (minimum of 4 months is required). If at least 4 months of usage is not available, then we will use the <u>New Homes Usage</u> <u>Table</u> to determine the appropriate system size based on livable square footage. Please note that, in this case, we will require proof of square footage. Refer to <u>FAQ #8</u> for square footage requirements.

## I recently purchased an electric vehicle (EV) while also deciding to participate in the Solar\*Rewards program. Can I size the PV array to include this increase in future energy use?

Yes, new electric vehicle purchases follow a similar process as new construction with atypical loads. Based on average electric vehicle energy usage identified in <u>The EV Project</u>, up to 250 kWh per month can be added to your average historical load. Here's how it works:

*If you have less than 4 months of consumption history that includes EV load:* We will add 250 kWh per month to your consumption history when calculating the 120% rule. This consideration will allow installers to size systems based on the future EV consumption when premise historical data is absent.

*If you have at least 4 months of consumption history that includes EV load*: We will not make any additions to your consumption when calculating the 120% rule.

When submitting your application, you are required to provide a copy of the vehicle registration showing the registration address, which corresponds with the install address, as well as confirmation of the EV purchase date. If the EV is not in your possession yet, proof of purchase is acceptable in place of the vehicle registration.

## 6. How can I obtain access to bill history or data usage information for an account?

The following are three ways that a customer or installer can make a data request:

Xcel Energy customers can obtain billing and consumption information directly by calling 800.895.4999 and speaking with one of our customer service representatives.

Xcel Energy residential customers can sign up at no cost for <u>My Account</u> access to view and download up to 2 years of consumption history for their home.

Solar installers may request data for a customer by completing the <u>Data Consent Form</u>. Submit the request, and the completed and signed form to Xcel Energy at <u>datarequest@xcelenergy.com</u>.

### 7. What is the limit for a system size for new construction?

If the building is new construction, we will use the data we have to determine if the kW system is appropriate for the site. You can use the <u>New Homes Usage Table</u> to determine the appropriate system size for your home or business. Please note that proof of conditioned square footage is required.

The new construction table is designed to provide an estimate of a home's annual electricity use based on square footage. This is necessary to insure we are in compliance with the regulation that states PV systems can only provide up to 120% of a home's annual energy use. The table is based on survey results of average electricity use for homes within the square footage parameters listed. If the home in guestion is larger than typical, we do not have any good data on how much energy it may consume in a year. The only way we can properly size a system is if we are provided with load calculations for the home such as an energy model from Xcel's Energy Design Assistance Program. Another way to go about this might be to start at our 4,000 sq. ft. large end and add whatever "extra" loads may be in the house. For example, if the home has a pool/hot-tub a pump load could be added. If it has multiple refrigerators or a/c units those loads could be added. The builder will have to provide this type of information to us.

### 8. What is required for proof of square footage?

As proof of square footage for new construction, we require either a blueprint or floor plan. The document must clearly indicate the total livable square footage and address, and must be uploaded at the time of application submission. As proof of



square footage for buildings that are not new constriction, we require one of these options, or a printout of the property record from the City & County Assessor's Office. Square footage documents from Zillow, Realtor.com, etc. will not be accepted.

# 9. How can I calculate the PVWatts estimated annual output of an array that is smaller than .5 kW?

Please follow the instructions provided by PVWatts in the FAQs on their <u>website</u>. They are as follows: "Note that the relation of system output to the system size is linear. To run a PV system smaller than the allowed lower limit of PVWatts, run PVWatts using a system size that is some multiple larger than your desired system size; e.g., 10 or 100 times larger. Then divide the estimated electricity produced by this same multiplier."

### **Application Process**

## 10. Can I submit an application if I only have a temporary meter?

The customer needs to have a permanent account, premise and meter set up in order to submit a new application. The customer should contact Customer Service at 800.895.4999 to check if there is a permanent account set up. If there is not, the customer must contact the Builders Call Line at 800.628.2121 to set one up. We will not accept applications with 0's or 1's entered for the account or premise or with "unit temp" listed on the account.

### 11. What is the Application Deposit?

The Application Deposit is designed to promote the submission of project applications which have a very high probability of being completed. The application deposit will be refunded to the provider if the application is completed within 12 months from the date of application's incentive was set.

Application deposits are required to be postmarked within seven business days of the create date of the application. If we do not have receipt of the application postmark date complying with this rule, the application will be cancelled and reapplying to the program will be required.

Online payments are now available in the application portal in the Documents and Payments stage. To complete your payment online with Wells Fargo, please enter the Primary Authorization Code and Secondary Authorization Code which is unique to your account. This information can be found on the Documents & Payments tab under 'Payments'.

## 12. Can I drop off my Application Deposit to the Xcel Energy offices?

No. We will not accept deposits, or any other Solar\*Rewards documents, that are hand delivered to our offices or mailroom. A deposit form must be completed and mailed with the payment. The deposit form can be found here. Also please remember that we require an individual check for each application. *Online payments are now available in the application portal on the Documents and Payments stage. See* FAQ #11 *for additional details for online payments.* 

### 13. What is the Interconnection Study Fee?

This is a standard fee that we collect for all Solar\*Rewards applications. The collected payment goes directly toward the cost of reviewing the associated engineering documents for approval. We collect this fee prior to the engineering review stage of the application process. The fee is set as follows, per the Interconnection Guidelines:

Level 1: \$100 (systems <= 10 kW)

Level 2: \$1,000 (systems >10-250 kW) OR \$2,000 (systems >250 kW-2 MW)

### 14. What is the NABCEP Form and why is it required?

Colorado law requires that PV systems installed after January 1, 2012, have a certain level of personnel, certified by the North American Board of Certified Energy Practitioner (NABCEP), involved in order for systems to receive incentives. Xcel Energy is required to collect and retain documentation that those levels were met. To accomplish this, we require a Photovoltaic Installation Supervision Certification form as part of our application process. The form is downloaded from the online application website and required in order to move forward in the process.

## 15. Can I change the size of my system during the application process?

You may make changes to the PV system specifications only before the "Retrieve Documents" button has been selected in the Final Information tab, generating the contractual Documents to Sign. At this point in the process, you will be confirming your system information and will no longer have the option to make changes. Acceptable system changes prior to retrieving documents are restricted to +/- 10% of the original estimated array capacity entered on the Start tab of the solar application. If a system changes by more than +/- 10%, the application will be cancelled and the application deposit will



be forfeited to the RESA. The system change cannot exceed 120% of consumption and must stay within the applied for program size limits.

When a system size changes, we will review the 120% of consumption rule a second time. We will use the previous 12 months of consumption from the create date of the application. If the system exceeds the 120% rule you will forfeit your deposit and no meter will be installed until we are certain that the system size does not go over 120% of consumption. If the system size does not change before retrieving documents, we will not review the 120% rule again.

# 16. Can I change the equipment/hardware during the application process?

Yes, you can change the equipment/hardware during the process. You will need to upload a new Site Plan and Line Diagram prior to the application moving into Engineering Review. If the changes are made after Engineering Review approval, a second Study Fee may be required for the additional review.

### 17. How long do I have to complete my installation?

Applications are valid for 365 days from the date of application submission. An application is complete when the final REC Contract is uploaded. At the first of each month we will cancel any applications that have expired (exceeded the 12 month window). The deposits will be forfeited to the RESA.

### 18. Can I apply for an extension?

Our standard policy allows for a one-time extension of 60 calendar days on the 1 year window. A project extension will be considered under the following conditions only:

- The application is within 60 calendar days of the expiration date
- The request is made at least 2 weeks prior to the project expiration date
- Engineering review has been completed and the application is at the Final Documentation stage

You will need to complete an Extension Request form which can be found <u>here</u>. Your request will be reviewed by the Solar\*Rewards team. Once reviewed, we will reply via email to your request. We reserve the right to deny an extension request, and to change our extension policy at any time if it is no longer in line with program objectives. At the end of the 60 day extension period you are required to have the project completed, which means the application must have all required documents executed for the Final Documentation stage, including the signed REC Contract.

### **Program Rules and Requirements**

# 19. Can I install PV on a building's roof and back feed another separately metered building?

### For Roof Mounted Arrays:

PV systems shall be interconnected to the meter that serves the building or structure in which the arrays are located. If there are multiple meters serving a single building or structure, the PV system shall be interconnected to the meter that serves the portion of the building in which the arrays are located. No intermingling of systems and premises will be permitted.

### For Ground Mounted Arrays:

PV systems shall be interconnected to a meter on the same parcel/property in which the array is located. If there are multiple meters on a single parcel/property, multiple systems may be installed, provided the entirety of the PV system is located on the same parcel/property that the meters serve. No intermingling of systems and premises will be permitted.

### 20. Can I install plug-in solar panels on my home?

Plug-in solar panels are not allowed in Xcel Energy service territory under the Solar\*Rewards program.

However, plug-in solar panels are allowed for projects that are submitted in the non-incentivized DG solar program as long as the following criteria is met:

- 1. Inverters must be UL Certified under UL 1741
- 2. Inverters must be permanently connected to the house wiring via a disconnect switch and production meter, if applicable
- 3. The PV panels are to be mounted on the roof or ground structure in a permanent manner

During engineering review, the engineers will confirm that the solar panels are NEC compliant and approved by the inspector.

## 21. Can I build a solar farm and sell the energy back to Xcel Energy?

Solar farms are considered a form of central solar. Currently these types of projects are considered under the Company's All-Source RFP, and not through the Solar\*Rewards program.



We do offer the Solar\*Rewards Community program. Learn more on our website or email <u>solarrewardscommunity@</u> <u>xcelenergy.com</u>.

## 22. Is there a list of equipment that is eligible through the Solar\*Rewards program?

The list of eligible equipment that we use is <u>Go Solar</u> <u>California</u>. If you plan to use non-UL listed modules you will need to have them approved though our metering and engineering department. Please fill out an exception form from the <u>Standard for Electric Installation and Use -</u> <u>Xcel Energy</u> manual.

### 23. Can I change installers or developers?

We do not allow changes to installers or developers during the application process.

### 24. Can you recommend an installer?

We do not recommend specific installers, but can suggest that you work only with licensed contractors specializing in solar installation. Also, we suggest requesting bids from at least three companies to compare. Always make sure to check the PV installer's rating and references with the Better Business Bureau and or the local chapter of the Solar Energy Industries Association (SEIA). You may also find it helpful to request referrals from other customers who have completed projects with the solar installer.

### 25. Why does Xcel Energy need proof of insurance?

We ask for proof of insurance for the financial protection of both the customer and Xcel Energy. This requirement protects both parties if anyone were to get hurt while working on the meter, whether it is an Xcel employee, neighbor, firefighter, or other individual. Having a solar install on your home makes you liable if someone were to get hurt while working on your meter. For systems owned by a third party developer, the insurance should be in the developer's name.

## 26. Why does Xcel Energy need to be listed as additionally insured?

For commercial properties and/or installs that are 250kW or larger, we require that Xcel Energy be listed as additionally insured because Colorado is a shared liability state where multiple parties can be determined to be "guilty." Also, since energy is flowing though the meter from both the customer and Xcel, both parties can be held liable if an incident were to occur. This also ensures that we are notified if a policy is changed or canceled.

## 27. If I live in a condo or townhouse will I need approval from my homeowners association?

It is a good idea to check with your homeowners association before starting any solar energy projects. If the roof space of your condo is owned by the HOA then you will need an easement in order to install your PV system. Please contact <u>solarprogram@xcelenergy.com</u> for more information on easements.

# 28. Can I move my solar system to a different address if I move or buy another home?

We do allow PV systems to be moved from one premise to another however they will no longer be eligible for the Solar\*Rewards program and your Solar Bank will not be carried over to a new address.

The original Solar\*Rewards contract will be void and you will need to reapply to the non-incentivized DG solar program under the new address. Please contact <u>solarprogram@</u> <u>xcelenergy.com</u> to let them know the system is being relocated.

# 29. What happens if I sell my house during the 20-year contract period?

If you sell your home after the application process is complete, you may transfer the Solar\*Rewards Contract to the new owner with an <u>Assignment of Contract</u>. The owner would assume responsibility for the terms of the contract. If the new homeowner elects not to sign the assignment form, you as the original contract signer would retain responsibility for the contract. In the event that damages are sought for breach of contract, those damages are limited to repayment of the prorated portion of the remaining contract term. The new homeowner needs to sign a new Interconnection Agreement with Xcel Energy to receive the benefits of the net-metered rate. The new homeowner will also need to supply proof of insurance and will need to complete their own Solar Bank Election Form. Please <u>visit our website</u> for the instruction and forms required to complete an Assignment of Contract.

## 30. I purchased a home (or lot) that is currently being built. I am also purchasing a solar system that will be installed on the new home. I do not have an Xcel Energy account yet, how can I apply for Solar\*Rewards?

New construction applications with a temporary meter servicing the location MUST have a permanent account number and premise number. Please apply under the homeowner/end-user's name and the address of the solar



system install (new home). Please note that we also need a Final Electrical inspection, as well as proof of insurance, which must be in the homeowner's name. Please see FAQ #10 for additional details on temporary meters.

### 31. What is the Interconnection Agreement?

For all applications, a signed Interconnection Agreement is required. The document is a broad agreement that is used for all of the various programs and system sizes, and contains the terms and conditions for interconnecting to the Xcel Energy electric grid. There are 3 exhibits that are as follows:

#### Exhibit A-

This exhibit references the one-line diagram that was submitted as part of the application process for your PV system. This one-line diagram has been approved, as indicated during the application process.

#### Exhibit B-

This exhibit includes a list of the additional engineering and installation costs associated with interconnecting your PV system to the Xcel Energy grid. If there are no costs detailed on this exhibit, then the cost is zero.

#### Exhibit C-

This exhibit references the Small Generation Interconnection Application, which is only relevant to applications for systems greater than 10 kW. If your system is less than or equal to 10 kW, this exhibit does not apply.

## 32. What is the definition of a contiguous site and how is it relevant to Solar\*Rewards?

For projects that will be installing solar or other alternative electrical energy-producing improvements on multiple structures on a property or consumer's site, the maximum system size that will be incentivized under the Solar\*Rewards program is 500kW. This applies to any capital improvements to existing SINGLE-FAMILY residential, MULTI-FAMILY RESIDENTIAL, commercial, or industrial structures, or other structures on contiguous property under common ownership. An on-site solar system shall be sized to supply no more than 120% of the average annual consumption of electricity by the consumer at that site. The consumer's site includes all contiguous property owned or leased by the consumer.

## 33. What are the options for my excess generation or Solar Bank credits?

You must make a decision regarding your net metered Xcel Energy account. Please note that this is separate from your monthly REC incentive payments.

A. Continuous Rollover Credits: Any excess generation from your net metered PV system will be rolled over month-tomonth, year-to-year and held in a Solar Bank. The credits will never run out, so you can use them whenever your consumption from the grid exceeds your generation on the net meter. However, you cannot cash out your Solar Bank, and no credit will be given if you move or stop service. Credits cannot be transferred between Xcel Energy accounts or to a new homeowner if a customer moves. Once Rollover has been elected, you cannot change to the Waive option.

B. Waive Decision Until Later Date: You choose to waive the decision until a later date. By waiving your decision, you will default to a year end payout. Any excess generation from your net metered PV system will be rolled over monthto-month and held in a Solar Bank. Xcel Energy will cash out your Solar Bank at the end of the year, and send you a check for the excess energy. We buy this excess energy at a rate of the average hourly incremental cost of electricity (AHIC) from the previous 12 months. By choosing to waive your decision, you can still make a one-time choice to move to Continuous Rollover Credits at any time during the life of your contract.

To change your election, you will need to complete a Solar Bank Election form <u>here</u>. Complete the information, sign the bottom and email it to solarprogram@xcelenergy.com.

#### Historical AHIC amounts:

2016: 1.355¢	2015: 1.765¢	2014: 2.616¢
2013: 2.386¢	2012: 1.744¢	2011: 2.905¢

### 34. How is the Average Hourly Incremental Cost (AHIC) of Energy determined?

PSCo uses a Cost Calculator to determine the incremental system costs of the last 50 MW block of energy to service native load. The program determines the cost of the energy, including fuel associated with generation and applicable economic purchase transaction costs. For each hour, the program stacks the resources that supplied energy during the hour based on their costs in one MW increments. After all costs have been assigned and stacked, an average is



calculated for the last 50 MWs to determine PSCo's actual average hourly cost of the last 50 MW dispatched for native load.

## 35. Can I install a PV system and not participate in the Solar\*Rewards program?

There is an option to get your system interconnected without applying for a Solar\*Rewards application, please visit our Net Metering site for information.

### 36. When can I turn on my PV system?

After the Xcel Energy Meter tech has installed your Net/PV Production meter, a door hanger will be left that serves as your Permission To Operate (PTO) and you may turn on your PV system. You will also receive an email from Xcel Energy stating you now have permission to operate your system. Xcel Energy does not turn on the PV system for you.

We do not authorize you to turn on the system prior to the net meter installation. Doing so can cause billing and payment problems and can also delay your REC payments.

## 37. Do you provide data on participation in the Solar\*Rewards program?

Our monthly program participation data is submitted to and published by the Colorado Public Utilities Commission. The information is filed with the Commission in Proceeding 06S-016E (RESA Suspension) and is available on the Commission's website. The data is available to the public.

### Incentives

### 38. Can I assign my REC payments to an alternate recipient?

REC payments cannot be assigned and can only be made to the owner of the PV system; the homeowner or third party developer. All REC payments are monthly payments in the form of a check.

### 39. How do the REC payments work?

Each month, the production meter, which records the actual production of the PV system, is read at the same time as the net meter. A check is issued based on actual production from the production meter at the rate indicated on your Reservation Letter and REC Purchase Contract. In addition, each month you will be billed on your net usage (total usage minus total production for the month) as measured by the net meter. For example:

- Your PV system produces 4,000 kWh in one month.
- You use a total of 6,000 kWh in the same month.
- You will receive a REC payment of \$20 (4,000 kWh x \$0.005).
- You will be billed on the net usage of 2,000 kWh (6,000 kWh usage 4,000 kWh production).

### 40. How are REC payments made?

REC payments are paid out monthly in the form of a check. The payment is based on the actual production from the PV system as measured by the production meter. There is not an option to have the payment credited toward the account balance.

As per the terms of the settlement, payments for the 20 year sale of RECs are made as follows:

over a 10 year period*
over a 20 year period
over a 20 year period

\*For the Small Customer Owned program, the contract length is 20 years. Xcel Energy agrees to pay 10 years' worth of REC payments to the customer. These payments entitle Xcel Energy to own the RECs for the full 20 years.

### 41. Does Xcel Energy issue 1099s?

Xcel Energy is not required to issue 1099s for rebates and REC payments. The rules that require 1099 reporting are different than the rules that determine taxable income, and there are several exceptions to 1099 reporting that apply to different payments and recipients. Therefore, whether or not a company issues a 1099 should not be viewed as an assertion by the company about whether a payment should be included in the taxable income of that recipient. As a matter of policy, Xcel Energy does not provide tax advice to its customers and other businesses.



### **Metering and Billing**

### 42. Can I run my PV system before a net meter is installed?

While you should test your PV system to make sure it is operational, any excess energy delivered back onto Xcel Energy's grid might not be counted as a credit until properly net metered for production. Net metering and billing will not occur until the net meter is installed and the customer is placed on the PV rate. Running a PV system with a standard electronic meter may cause incremental charges for energy that runs back through the meter and onto the grid; thus we recommend testing the system and moving to full operation when the new net meter is in place. Refer to FAQ #36 for additional information.

### 43. Do I need to be connected to the grid?

Yes, to qualify for Solar\*Rewards, you will need to be connected to our grid. While your system generates the bulk of your own electricity during the peak hours of daylight, we will seamlessly supply your electricity at night and on very cloudy days.

Xcel Energy requires at least one utility accessible, lockable in the off position, visible open AC disconnect on all photovoltaic installations. We also require a single point of disconnect to isolate the inverter from the production meter. In many cases one knife blade switch properly placed will meet both requirements. However, in situations where multiple or micro inverters are used, a utility accessible dedicated solar circuit panel with a main breaker can be used to combine inverter outputs and isolate the production meter from the inverters. If the dedicated solar circuit panel is utilized, a utility accessible, lockable in the off position, visible open AC disconnect is still required somewhere in the PV circuit.

### 44. Why is an AC Disconnect required?

Xcel Energy requires an AC disconnect on photovoltaic installations for a variety of reasons. Number one is safety. Without a disconnect to isolate the PV source from the production meter our meter personnel have found that when performing wiring checks on the production meter sockets they see what appears to be a phase to phase short. In most cases this is due to the inverter design, but it could also be a wiring error that would be safety concern. Xcel Energy reserves the right to shut off any distributed generation that is causing system issues or is found to be not in compliance with our standards and program requirements. If the PV systems is to be shut off for an extended period of time for system maintenance or any other reason, we prefer that the disconnect located between the inverter and the production meter is opened so that the production meter remains energized. When a meter is de-energized for two billing cycles our system automatically generates investigate orders to find out why the meter is not reporting reads. This creates additional work for our already understaffed meter department.

### 45. How much electricity will my PV system produce?

The amount of electricity generated by a solar system is dependent upon several factors, primarily system size, orientation of the system and shading. Typically, a solar system using about 120 square feet of solar panels will generate about 1,500 kWh per year.

## 46. How much energy is my PV system producing?

If your home has a production meter, you can review your system's monthly production by calling the Energy Experts at 800.824.1688. The production information can also be found on your monthly statements. Please review our <u>Metering</u> and Billing FAQ for additional details on how to read the statements. If your home does not currently have a production meter, you can request installation of a production meter by Xcel Energy, or purchase a production monitoring system from a third party installer.

### 47. What is a PV production meter?

A PV production meter is a standard meter that is set up for payment rather than for billing. It is used to calculate the monthly REC payments and track production.

## 48. How do the summer Tiered Rates affect my bill if I am a Solar\*Rewards Customer?

A two-tiered rate structure will be in effect each year from June 1 through September 30. Under this rate structure, customers will pay the lower Tier 1 rate for their first 500 kilowatt hours (kWh), and the higher Tier 2 rate for electricity used above 500 kWh.

If you are a Solar\*Rewards customer, you will only be charged at the higher Tier 2 rate if your NET usage (one month of usage on the net meter minus the same month of production from your PV system) reaches the 500 kWh limit.



# 49. Can I participate in Solar\*Rewards if I am on a special rate plan (Time of Use Pricing, Peak Demand Pricing, etc.)?

We offer these two new rate plans to all residential customers- including those with rooftop solar. You can find out more here.

### 50. What does RESA stand for and how is it used?

RESA stands for Renewable Energy Standard Adjustment. In 2004, when Colorado voters approved Amendment 37 requiring utilities like Xcel Energy to obtain 10% of their retail sales from renewable energy sources, they also created a fund that lets us pay for the cost difference between renewable energy and fossil fuel costs. That fund is financed by a 2% charge on every Xcel Energy electric retail customer's monthly energy bill in Colorado. All investor-owned utilities in Colorado collect this RESA money from their customers' electricity costs. The RESA money we collect is considered a "passthrough" and utilities use this money to manage programs that encourage investment in renewable energy without making a profit.

The RESA funds we collect by Colorado law are used to increase the portion of electricity generated from the sun, wind, and biomass. The funds pay for customer programs like Solar\*Rewards, Solar\*Rewards Community, and Windsource.

These programs not only lower the electricity bills of program participants but help create a cleaner Colorado for everyone. Since the original passing of Amendment 37 in Colorado, the renewable energy standard affecting all investor-owned utilities has increased to 30% by 2020. The renewable energy standard (RES) is a State requirement that requires increased electricity production from renewable energy sources like wind, solar, and biomass. Xcel Energy has been a supporter of the RES increase because of the strong interest of our customers in renewable energy and the Company's aggressive environmental position. And thanks to our customers, we are on-target to meet this 30% goal.

