

# 2018 Solar Installer Training

March 2018



# Welcome to the 2018 Solar Installer Training

- **Goal:** To provide installers and developers with the information necessary to complete Xcel Energy's solar applications in a timely manner with little to no errors or delays
- Achieving the above goal will aid in meeting or exceeding our mutual customer's expectations, in terms of interconnection timelines, resulting in an overall increase in customer satisfaction



# What Can I Learn From This Training?

- **New installers:** Familiarize yourselves with the basics of the solar application process and find answers to common questions
- **Current installers:** Continue your education and learn about best practices
- **Customers:** Learn more about the solar application process and receive answers to common questions



# Team Introductions

- **On-Site Solar Team (Colorado)**
  - Program Manager: Diana Naatz
  - Marketing Assistant: Alex Nordlund
- **Internal Team Players**
  - Customer Service/Energy Experts
  - Builders Call Line
  - Metering and Area Engineering
  - Field Metering
  - Billing
- **External Industry Team Players**
  - Installer
  - Developers
  - Local inspectors
  - Home builders



# Solar DG Training: What's New?



## Process Changes in 2017/2018

- Online payment option for program fees
- New email notification for Application Notes
- Engineering documents & payments required within 30 days of PM approval
- Battery back-up application process

# Application Process

# Application Process



1. Registration
2. Start
3. Contacts
4. System Details
5. Documents & Payments
6. Engineering Review
7. Final Information
8. Meter Installation

# Step 1: Registration



Application Portal



RESPONSIBLE BY NATURE®

## Solar\*Rewards®



The Solar\*Rewards Program Website allows customers and installers/developers to create, access and edit Solar\*Rewards opportunities. Each participating entity will create an account with a unique username and password to access the site. Once logged in, you can create a new Solar\*Rewards opportunity that will follow a step-by-step application process.

### Login

Username

e.g. xxxxxx@xcelenergysolarrewards.com

[Forgot Your Username?](#)

Password

**Sign In**

[Forgot Your Password?](#)

### Sign Up

Don't have a Solar\*Rewards account? To register for online access to the Solar\*Rewards Program Website, you will need some basic information regarding your Xcel Energy account (if you are a customer) or business details (if you are an installer/developer). After you register you will receive an email with your login credentials to complete the process.

**Register Now**



# Step 1: Registration

Please be sure to register under your respective company name if applicable

- Usernames will always end in *@xcelenergysolarrewards.com*
- Forgot Your Username?  
Email [solarprogramm@xcelenergy.com](mailto:solarprogramm@xcelenergy.com)
- Password? Select “**Forgot Your Password?**” and an email will be sent to reset your password
  - Email will not be sent unless the username is correct
- Once logged in, you can create new applications at any time (as long as capacity is available)

# Step 2: Start

Fields displaying adjacent red bar are required

## Program & Applicant Information

|                          |                                 |                          |  |
|--------------------------|---------------------------------|--------------------------|--|
| Program State            | <input type="text" value="MN"/> | Program Type             | <input type="text" value="2018 - MN - Solar*Rewards"/> |
| Applicant Account Number | <input type="text" value="0"/>  | Applicant Premise Number | <input type="text" value="0"/>                         |
| Xcel Meter Number        | <input type="text"/>            |                          |  |

## Site Details

Check all below that apply.

|                          |                          |                    |                                       |
|--------------------------|--------------------------|--------------------|---------------------------------------|
| Premise Address          | <input type="text"/>     | Premise City       | <input type="text"/>                  |
|                          |                          | Premise ZIP Code   | <input type="text"/>                  |
|                          |                          | DG Fuel Type       | <input type="text" value="--None--"/> |
| Existing DG Size (AC kW) | <input type="text"/>     |                    |                                       |
| New Construction         | <input type="checkbox"/> | Existing PV System | <input type="checkbox"/>              |
| Government Entity?       | <input type="checkbox"/> |                    |                                       |

- Program State
- Program Type
- Xcel Energy Applicant Account Number
- Xcel Energy Applicant Premise Number
- Premise Address
- DG Fuel Type (Solar PV)
- Estimated Array Capacity (kW)
- DG Generator Type
- Optional Fields:
  - New construction
  - Existing PV System
  - Government Entity

I have read, understand, and accept the [Terms and Conditions](#)

*Call Customer Service if you need to confirm the account/premise numbers: 1-800-895-4999*

# Account Numbers

“How do I enter the customer’s account number? I’m entering the 10-digit number and it’s not working”

## Program & Applicant Information

Program State  Program Type

Applicant Account Number  Applicant Premise Number

Xcel Meter Number

## Site Details

Check all below that apply.

Premise Address

Premise City

Premise ZIP Code

New Construction

Existing PV System

**Solar\*Rewards Example**

PUBLIC SERVICE COMPANY OF COLORADO PAGE 1 of 4

| MAILING ADDRESS   |                | ACCOUNT NUMBER  | DUE DATE   |
|---|----------------|-----------------|------------|
| JOHN E. CUSTOMER<br>MARTHA W. CUSTOMER<br>1234 ELECTRIC AVENUE<br>TAKUHIER, CO 00000-0000 |                | 53-1234567890-1 | MM/DD/YYYY |
| STATEMENT NUMBER  | STATEMENT DATE | AMOUNT DUE      |            |
| 0123456789  | MM/DD/YYYY     | \$00.00         |            |

- Must be permanent account and premise numbers
- Only enter the numbers in between the dashes of the account number
- Do not enter any leading zeroes
- Having a recent copy of the customer’s bill on hand when applying for a solar application is highly advised
- Need help? Click the question mark next to the “Applicant Account Number” field

# Program Type

- Choose your program type:
  - Solar\*Rewards (incentivized program)
  - DG Net Metering (non-incentivized program)

## DG Net Metering Products

MN - 2018 DG < 40 kW

MN - 2018 DG > 40 kW and < 1000 kW

MN - 2018 DG > 1000 kW

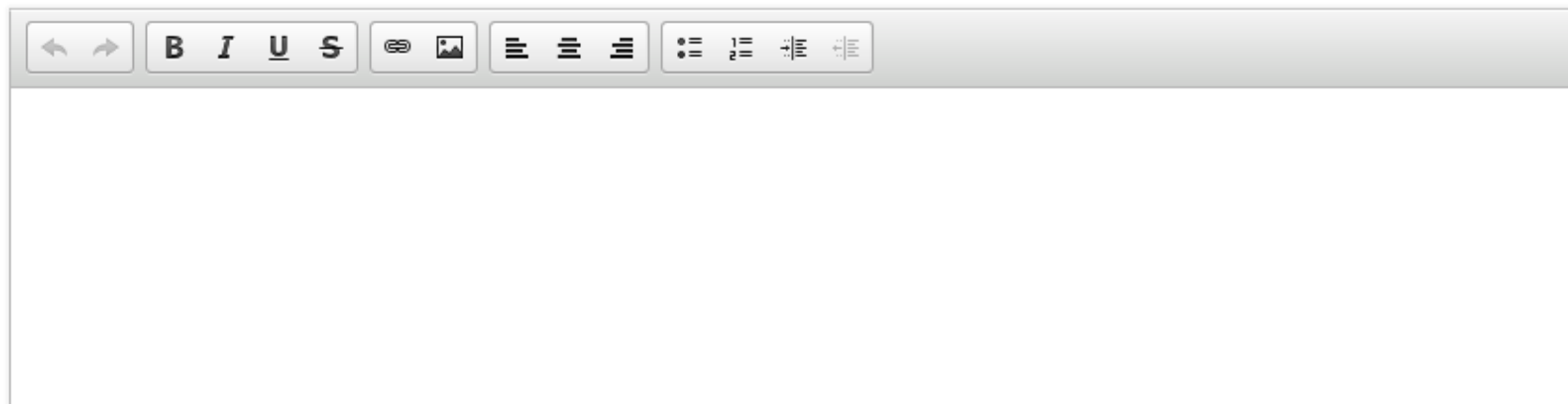
## Solar\*Rewards Products

2018 - MN - Solar\*Rewards

# Program Type Cont...

- The user will ONLY be able to enter the system size (kW) applicable to the Program Type selection
  - For example, if the solar\*rewards program type is selected you cannot create an application for 30 kW since the small program maximum size is 20 kW
  - If the system was registered within the wrong program, please go to the Application Summary tab and click on 'Cancel Application' as soon as possible, then re-apply for the appropriate program offering

## Application Notes



The image shows a rich text editor interface for 'Application Notes'. It features a toolbar with icons for undo, redo, bold (B), italic (I), underline (U), strikethrough (S), link, image, bulleted list, numbered list, indent, and outdent. Below the toolbar is a large, empty text area for entering notes.

Notes History

Save Share **Cancel Application**

# Special Circumstances

**SolarRewards® Application**

**Next Action-** App Owner: Complete initial application details and select "Save and Continue" to move to "Contact Information"

**Program & Applicant Information**

Program State:  Program Type:

Applicant Account Number:  Applicant Premise Number:

Xcel Meter Number:

**Site Details**

Check all below that apply.

Premise Address:

Premise City:

Premise ZIP Code:

DG Fuel Type:

Existing DG Size (AC kW):

New Construction  Existing PV System

Government Entity?

I have read, understand, and accept the [Terms and Conditions](#)

New Construction ?

Existing PV System ?

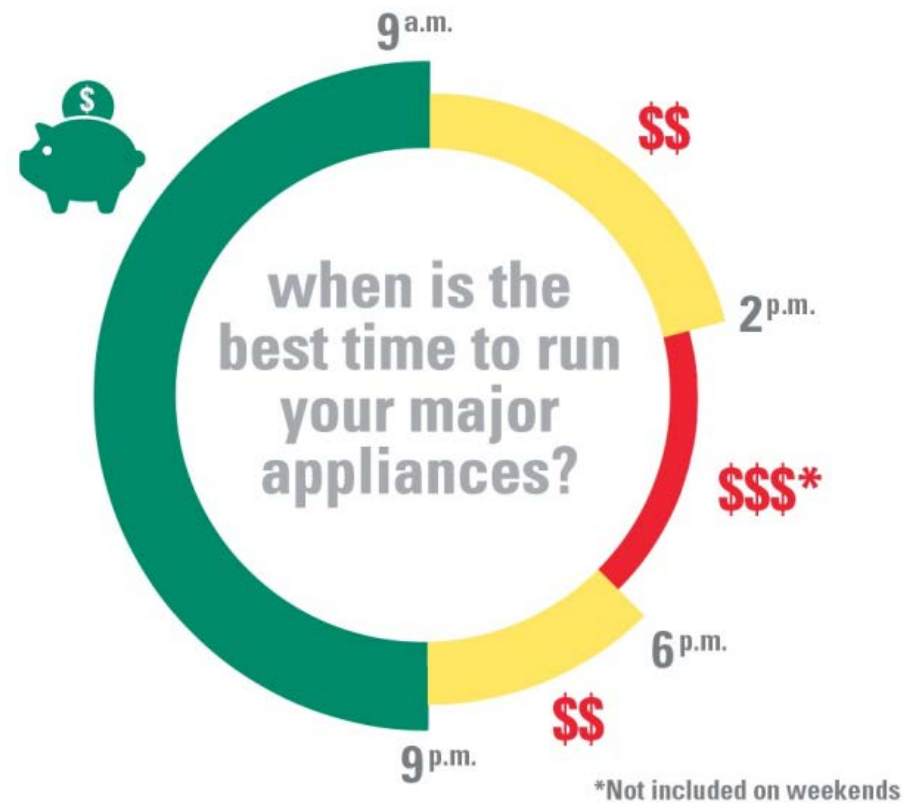
Government Entity? ?

- Please make sure you are selecting a box if a special circumstance exists
- Checking the applied box(es) will trigger certain events to occur

# Time of Use Rate (Residential Only)

- Under Time of Use Pricing, the customer will receive credits for production based on when the energy was generated and the associated rate during that time
- Check the “TOU Rate?” checkbox if the customer wishes to be switched to the Time of Use rate
- Customer is switched to the TOU rate once solar meters are installed
- Checking the box will also trigger a customer survey to be sent out in the Documents & Payments tab

## Time of Use Pricing



Learn more about new Residential Pricing Plans at  
[xcelenergy.com/residentialrates](https://xcelenergy.com/residentialrates)

# Electric Vehicles

## “How will the energy usage be calculated if the customer has an electric vehicle?”

- Submit copy of vehicle registration showing address corresponding with PV install address
  - Will accept the EV proof of purchase
- 120% Rule Calculation
  - < 4 months of consumption history with EV: Add 250 kWh per month (3,000 kWh total per year) to consumption history
  - $\geq$  4 months of consumption history with EV: Calculate based on customer's average annual consumption with an EV. No exceptions





# New Construction

**“We have permanent account and premise numbers, but they are under the builder’s name. Can I start a solar application?”**



- Yes, an application can begin under builder’s name, as long as the site has permanent account and premise numbers
- After solar meters are installed and the new customer’s name is on the electric account, SolarProgram can initiate an [Assignment of Contract](#)

# Existing PV System

- If there is an existing PV system at the premise, must check the box noting Existing PV System on the Systems Details stage

|                           |                                     |
|---------------------------|-------------------------------------|
| <b>New Construction</b>   | <input type="checkbox"/>            |
| <b>Existing PV System</b> | <input checked="" type="checkbox"/> |
| <b>Government Entity?</b> | <input type="checkbox"/>            |

- Must also enter in the Existing DG Size (AC kW) so that our engineers know what the total aggregate solar capacity is at the premise

|                                 |                          |
|---------------------------------|--------------------------|
| <b>CT Cabinet Needed</b>        | <input type="checkbox"/> |
| <b>Battery Backup</b>           | <input type="checkbox"/> |
| <b>Pre-Existing Generator?</b>  | <input type="checkbox"/> |
| <b>Service Voltage</b>          | 120/240 1ph              |
| <b>Existing DG Size (AC kW)</b> | 2.200                    |

\*This information is checked during Engineering Review and can cause delays if the information isn't provided upfront

## Existing PV System Cont...

**“A customer wants to add an additional PV system to their already existing system. Do I need to disclose the pre-existing system on the application or on the system designs?”**


- Existing system and interconnection point must show on the site plan and line diagram
- The aggregate of the existing and additional system sizes cannot exceed 120% of the customer’s annual electricity usage
- A second production meter may or may not be installed. Email [SolarProgramMN@xcelenergy.com](mailto:SolarProgramMN@xcelenergy.com) to find out

# CT Cabinet Needed

“How do I submit a new solar application that needs a CT (Current Transformer) Cabinet ?

- Check “CT Cabinet Needed” checkbox in the System Details tab

## PV System Details

|  |                                       |                          |                                     |
|--|---------------------------------------|--------------------------|-------------------------------------|
| Estimated Project Cost   | <input type="text"/>                  | <b>CT Cabinet Needed</b> | <input checked="" type="checkbox"/> |
| ≤ 10' between production & service mtrs?   | <input type="text" value="Yes"/>      | Battery Backup           | <input type="checkbox"/>            |
| Generator  | <input type="checkbox"/>              | Pre-Existing Generator?  | <input type="checkbox"/>            |
| System Inverter Phase  | <input type="text" value="--None--"/> | Interested in SPVTOU     | <input type="checkbox"/>            |
| Service Voltage  | <input type="text" value="--None--"/> |                          |                                     |

- Installer will be notified to coordinate with a Metering Engineer for CT delivery

# Battery Back Up

## “How do I submit a new solar application with a battery backup?”

- Check “Battery Backup” checkbox on the System Details tab

### PV System Details

|  |  |                         |                                     |
|--|--|-------------------------|-------------------------------------|
| Estimated Project Cost ?                   | <input type="text" value="562,500.00"/>        | CT Cabinet Needed ?     | <input type="checkbox"/>            |
| ≤ 10' between production & service mtrs? ? | <input type="text" value="Yes"/>               | <b>Battery Backup</b> ? | <input checked="" type="checkbox"/> |
| Generator ?                                | <input type="checkbox"/>                       | Pre-Existing Generator? | <input type="checkbox"/>            |
| System Inverter Phase                      | <input type="text" value="Three Phase"/>       | Interested in SPVTOU ?  | <input type="checkbox"/>            |
| Service Voltage ?                          | <input type="text" value="240/480 delta 3ph"/> |                         |                                     |

- Then leave a note in the Application Notes section with the storage configuration followed

Notes History    2017-09-19 09:34:14 Mountain (AC, Net Metered, Non-Export 2C.) -----

- Battery design must be shown on the Line Diagram for consideration

# Battery Back Up Cont...

## “What are the acceptable storage configurations for batteries?”

- The [Storage Guidance](#) document details the acceptable configurations

Xcel Energy NSPM Electric Energy Storage Interconnection Guidelines (V1.0, 6 Nov 2017) (PDF)

- The eight acceptable configurations are below:
  - AC, Standby Energy Storage 1A
  - AC, Non-Net Metered, Non-Export 1B
  - AC, Non-Net Metered, Non-Export W/Gen 1C
  - AC, Net Metered, Standby Energy Storage 2A
  - AC, Net Metered, 100% Renewable Export 2B
  - AC, Net Metered, Non-Export 2C
  - DC, Net Metered, 100% Renewable Export 3A
  - DC, Net Metered, 100% Renewable Export 3B

# Battery Back Up Cont...

## “What is required to submit a new solar application with battery?”

- Every application with battery backup must submit a completed and signed Attestation
- Template Attestations are available for download from the [Solar Developer Resources](#) webpage:
  - Attestation 1A and 2A
  - Attestation 3A and 3B
  - Attestation 2C and 2B
  - Attestation 1B and 1C
- Attestations provide the additional detail and documentation required for a more streamline and efficient review by Xcel Energy engineers



### Attestation of Electric Storage Operation Limited to and in Compliance with Configurations as Outlined in Energy Storage Guidance Document 2

#### Purpose of Attestation

Historically Distributed Energy Resources (DER) were assembled from discrete components or functional assemblies where the logic and operational approaches could be seen and analyzed. Today, much of the functionality is handled by an on-board computer following firmware and software instructions in order to achieve the desired results. To determine these actions requires extensive detailed review of the operating manuals and often inquiries with the manufacturer. Attestations are used to affirm the desired functionality is present in lieu of extensive and time consuming documentation interconnection reviews. An update to the firmware which modifies or adds operation modes or changes the required functionality is considered a facility modification and subject to a partial or full interconnection review as stated in the Interconnection Agreement, Section VIII.G. This applies to all sources, whether generators or energy storage. Guidance Document 2, Configurations 2B and 2C require an interconnection review. The attestation document will be included in and be a part of the Interconnection Agreement and subject to the Interconnection Agreement's remedies for non-compliance.

#### Definitions

“Parallel Operation of Energy Storage”- is considered a source operated in parallel with the grid when it is connected to the distribution grid and can supply energy to the customer simultaneously with the Company's supply of energy.

“Energy Storage Guidance Documents”- Guidance documents for the interconnection of electric storage based on agreed to terms from CO PUC Proceeding No. 15AL-0048.

#### Non-Exporting Configurations Covered:

##### Energy Storage Guidance Document 2, Configurations 2B and 2C

2B Parallel Energy Storage With Renewable Generation, Net-Metering, with Export

2C Parallel Energy Storage With Renewable Generation, Net-Metering, with Storage Non-Export

# Step 3: Contacts

## Customer Contact

Customer name below must match name on Xcel Energy account.

|                             |                      |                             |                      |
|-----------------------------|----------------------|-----------------------------|----------------------|
| Customer Name               | <input type="text"/> | Premise Address             | <input type="text"/> |
| Customer Phone              | <input type="text"/> | Premise City                | <input type="text"/> |
| Customer Email              | <input type="text"/> | Premise State               | <input type="text"/> |
| Customer Email Confirmation | <input type="text"/> | Premise Zip                 | <input type="text"/> |
|                             |                      | Premise Address Description | <input type="text"/> |

## Installer Contact

|                              |                      |                              |                      |
|------------------------------|----------------------|------------------------------|----------------------|
| Installer Company            | <input type="text"/> | Installer Address            | <input type="text"/> |
| Installer Contact First Name | <input type="text"/> | Installer City               | <input type="text"/> |
| Installer Contact Last Name  | <input type="text"/> | Installer State              | <input type="text"/> |
| Installer Phone              | <input type="text"/> | Installer Zip                | <input type="text"/> |
| Installer Email              | <input type="text"/> | Installer Email Confirmation | <input type="text"/> |

## Developer Contact

|                              |                      |                              |                      |
|------------------------------|----------------------|------------------------------|----------------------|
| Developer Company            | <input type="text"/> | Developer Address            | <input type="text"/> |
| Developer Contact First Name | <input type="text"/> | Developer City               | <input type="text"/> |
| Developer Contact Last Name  | <input type="text"/> | Developer State              | <input type="text"/> |
| Developer Phone              | <input type="text"/> | Developer Zip                | <input type="text"/> |
| Developer Email              | <input type="text"/> | Developer Email Confirmation | <input type="text"/> |

- Customer Contact must match the customer listed on Xcel Energy account (as shown on the customer's bill)
- Installer Contact lists the system installer company
- Developer Contact can be the same or different as the Installer Contact
- Important to verify email addresses before continuing as all system generated emails and documents are sent throughout the process



## Step 4: System Details

- Populate all required fields, then click “Save”
- Select correct array type from drop-down menu
  - Fixed describes a ground mount
  - Fixed-Roof Mounted represents rooftop installation
- Add arrays/inverter hardware

### Array Detail

|                     |                     |
|---------------------|---------------------|
| # of Panels         | 12                  |
| Array Type          | Fixed-Roof Mounted  |
| Array Capacity (kW) | --None--            |
| Array PV Watts      | Fixed               |
|                     | Fixed-Roof Mounted  |
|                     | 1-Axis Tracking     |
|                     | 1-Axis Backtracking |
|                     | 2-Axis Tracking     |

# Array(s) and Inverter(s)

**“I can’t find the array and inverter I want to use when I try to enter my system details. Can I still use them?”**

- We accept all UL certified equipment

## Customer Assets

[Add Array](#) [Add Inverter](#)

| Action                                     | Asset #    | Type     | Hardware   | # of Panels | Array Capacity (kW) | Array PV Watts | # of Inverters | Power Rating (kW) |
|--|------------|----------|--|-------------|---------------------|----------------|----------------|-------------------|
| <a href="#">Edit</a>   <a href="#">Del</a> | CA-0120711 | Array    | <a href="#">SunPower - SER-235P</a>                          | 20          | 4.700               | 6,678          |                |                   |
| <a href="#">Edit</a>   <a href="#">Del</a> | CA-0120712 | Array    | <a href="#">Suntech Power - PLUTO240-Wde</a>                 | 11          | 2.640               | 3,751          |                |                   |
| <a href="#">Edit</a>   <a href="#">Del</a> | CA-0120716 | Inverter | <a href="#">SolarEdge Technologies - SE 10000A-US (240V)</a> |             |                     |                | 1              | 10.0100           |

- Equipment not listed in Application Portal? Send a screenshot from [Go Solar California](#) to [SolarProgramMN@xcelenergy.com](mailto:SolarProgramMN@xcelenergy.com) like the one below. We will add the equipment in the order the email is received

| Manufacturer Name | Inverter Model number    | Description                       | Power Rating (Watts) | Weighted Efficiency | Approved Built-in Meter | Notes |
|-------------------|--------------------------|-----------------------------------|----------------------|---------------------|-------------------------|-------|
| ABB               | MICRO-0.25-I-OUTD-US-208 | 250W Utility Interactive Inverter | 250                  | 96                  | Yes                     | NA    |

\*Work with Go Solar California to add equipment to their site if it is not yet listed before we can add it to our site

# 120% Rule Requirement

- PV systems can be sized to produce up to 120% of the customer's average annual electric usage. This is a state statute set forth by the State of Minnesota - all participants are required to adhere to it



## Solar\*Rewards

Greetings,

The Xcel Energy Program Review Team has resolved the 120% Rule conflict with application {!Opportunity.Integration\_Opportunity\_ID\_\_c} and has bypassed the rule for you to continue with the application.

Thank you,  
Xcel Energy

\*System generated email, please do not respond.

# 120% Rule Requirement Cont...

## “The application says I am failing the 120% Rule. What do I do?”

- Check the “Application Notes” on the Application Summary tab
  - You should receive a system generated email notification regarding the failure
- All new construction applications will initially fail since square footage must be evaluated to bypass the rule
- All existing structures/remodels will be evaluated based on 120% of the customer’s annual electric usage history as long as they have 4+ months of usage
  - If they do not have 4+ months of usage, the application will be evaluated based on livable square footage of the home



# Obtaining Customer Usage Data

## “How can I obtain my customers’ usage data to evaluate system size?”

Usage is private customer information, we cannot provide the usage numbers without the customer’s consent. Three ways to obtain the information are:

1. Customer signs data consent form

### CONSENT TO DISCLOSE UTILITY CUSTOMER DATA

CO

All requested information must be provided for the consent to be valid. This form may be available in other languages. To obtain a copy in another language, please contact [inquire@xcelenergy.com](mailto:inquire@xcelenergy.com). Para obtener una copia de este formulario en español, por favor contacte a su proveedor de servicios públicos.

Utility Name and Contact: Xcel Energy Correspondence Department

Physical and Mailing Address: P.O. Box 8, Eau Claire, WI, 54702

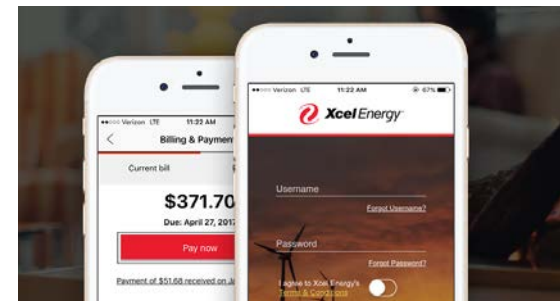
Phone: 1-800-895-4999

Email: datarequest@xcelenergy.com

Fax: 1-866-208-8732

For additional information, including the utility’s privacy policy, visit [xcelenergy.com](http://xcelenergy.com).

2. In Customers’ Xcel Energy MyAccount portal:
  - Pull up usage data and send it to Installer
3. Set Up a Delegate in MyAccount  
[How to Set Up a Delegate in MyAccount PDF](#)



# Proof of Square Footage

## “When do I need to upload Proof of Square Footage?”



- Proof of Square Footage is required for all premises with less than 4 months of electric usage history for the current customer
- New Construction/Remodel
  - Proof of square footage must be from the County Assessor Office or builder’s blueprints (new construction or remodel only)
  - Redfin.com, Realtor.com, etc. will not be accepted
- Must show the address where PV system is going to be installed
- Proof of Square Footage is required for additions

# Minnesota New Homes Estimator Table



| Square feet range (sq. ft.) | 120% Rule equivalent (kWh) | Allow PV system size (kW) |
|-----------------------------|----------------------------|---------------------------|
| 500–1,000                   | 5,311                      | 4.13                      |
| 1,001–1,500                 | 7,318                      | 5.69                      |
| 1,501–2,000                 | 10,215                     | 7.94                      |
| 2,001–2,500                 | 11,018                     | 8.57                      |
| 2,501 – 3,000               | 12,978                     | 10.09                     |
| 3,001– 3,500                | 15,618                     | 12.14                     |
| 3,501– 4,000                | 14,830                     | 11.53                     |
| 4,001– 4,500                | 17,887                     | 13.91                     |

\* Table helps to easily evaluate the max system size for applications that will be evaluated based on square footage

# Energy Model / Load Analysis

## “When do I need to submit an energy model/load analysis?”

- For new construction projects over 4,500 sf with planned PV systems larger than 13.91kW will require an energy load model stamped by a Principal Engineer (PE)
  - Must show a monthly or annual snapshot of the total estimated kWh usage
  - Must list the premise address for the PV installation
- For residential projects, you can submit a HERS (Home Energy Rating System) report to provide an estimated annual kWh usage to justify system size





# System Size Changes, +/- 10%

**“I need to change my system size. Is this allowed?”**

- Solar\*Rewards applications can adjust the system size by +/-10% from the Estimated Array Capacity field
  - Once the application is sent to Engineering Review the system size cannot change. No exceptions

## Array and Inverter Details

|                               |       |                              |       |
|-------------------------------|-------|------------------------------|-------|
| # of Panels                   | 10    | NamePlate Capacity (kW)      | 3.600 |
| # of Inverters                | 10    | Total System Power kW Rating | 3.200 |
| Estimated Array Capacity (kW) | 3.960 | System PV Watts              | 5,347 |

- DG Net Metering applications can change by any percentage before Engineering Review (120% rule must still pass)
- System changes after engineering rejections due to over-load of transformer capacity will be permitted

# Step 5: Documents & Payments



- Send Application Deposit/Study Fee Form and check to:  
***Xcel Energy DG, PO Box 59, Minneapolis, MN 55440-0059***
  - Application Deposit must be postmarked within 7 business days from the application Created Date (Solar\*Rewards applications only)
- OR

**Pay Fee Online**

## Account Setup

To verify Your identity, we need your Primary Authorization and Secondary Authorization

Primary Authorization

Secondary Authorization

Validate

- Fee invoice(s) will not be available on the Wells Fargo payment site until the following day from when applicant arrives at 'Documents and Payments' stage.  
Please be sure to wait 24 hours to submit payment.
- Payments will post to the applicable application OID the day after payment is made to Wells Fargo (another 24 hours).
- Please enter *Primary Authorization Code* **SR-XXXXXXX** and *Secondary Authorization Code* **XXXXX** to complete online payment with Wells Fargo.
- Primary and Secondary codes are unique to your account. Once an account is set-up, you can use the same codes for each application as needed.
- Credit card payment will not be accepted.

# Online Payment – Login/Enroll

- Click

**Pay Fee Online**

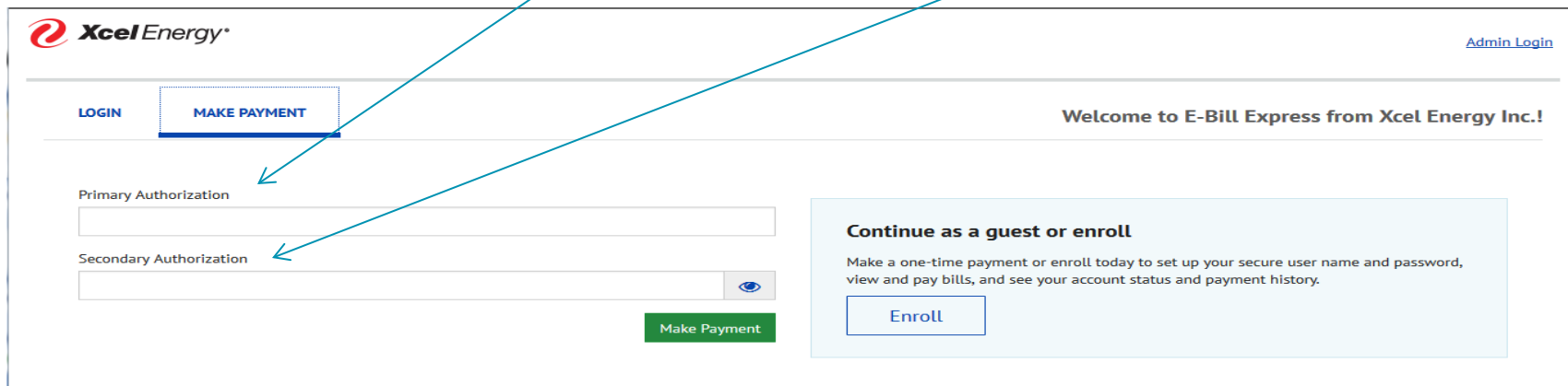
- Login or enroll


## Don't have a Login ID?

Enroll today to set up your secure user name and password, view and pay bills, and see your account status and payment history.

[Enroll](#)

- Enter **Primary Authorization Code** and **Secondary Authorization Code** as displayed on the Documents & Payments page




 [Admin Login](#)

[LOGIN](#) [MAKE PAYMENT](#)

Welcome to E-Bill Express from Xcel Energy Inc!

Primary Authorization

Secondary Authorization  
 

[Make Payment](#)

**Continue as a guest or enroll**  
Make a one-time payment or enroll today to set up your secure user name and password, view and pay bills, and see your account status and payment history.

[Enroll](#)

# Online Payment – Login/Enroll Cont...



- Enter the “Pay My Bills” section of the site

Pay My Bills

UNPAID HISTORY

| Invoice Date | Due Date | Invoice Number | Amount Due | Remaining Amount | Payment Amount |
|--------------|----------|----------------|------------|------------------|----------------|
|--------------|----------|----------------|------------|------------------|----------------|

MESSAGES

Bills are available on this site the day after the interconnection application and fee is created. Payments are posted to the

PAYMENT SUMMARY

0 Invoices \$0.00

Remove All

Payment Method Add A Payment Method

Checking Account WFB \*\*\*\*\*7147

Pay Date 11/14/2016

Payments confirmed before Monday, November 14, 2016 7:00 PM CT will be posted on Monday, November 14, 2016. Payments confirmed after Monday, November 14, 2016 7:00 PM CT will be posted on Tuesday, November 15, 2016.

Cancel Continue to Payment

- Click on “Add a Payment Method”
- Complete the bank account information and agree to the ACH debit authorization, then click “Add”
- Click “Continue to Payment”
- Click “By checking this box...” to agree with the Terms and Conditions
- Click “Make Payment”
- Click “Log Out”
- Credit cards are not accepted

# Systems 250 kW and over

## “What additional documentation should I submit for systems 250 kW and larger?”

- All systems 250 kW and over require telemetry and CT cabinets
  - [Xcel Energy Telemetry Requirements for Distributed Energy Resource Interconnections](#)
- Review performed by Xcel Energy metering and area engineers
- PE stamped Energy Model/Load Analysis (if applicable)
- CT cabinet checkbox (if applicable)

# Site Plan, Line Diagram

Solar Rewards® Application

Documents & Payments

Application #: OID2826306

**Next Action-** App Owner: Complete download/upload documents and payment requirements. Select "Save and Continue" for Program Review.

[Return Home](#)

Select document you want to upload:

(document type to upload)

Select document file:

[Browse...](#)

Upload file:

[Upload Document](#)

## Payments

The fields below will display the date a payment was received. If no date is displayed, we have not yet received the associated payment.

Total Amount Due \$0.00

Total Amount Paid \$100.00

Study Fee Received Date  [ [4/5/2017 3:43 PM](#) ]

- Upload a [Site Plan](#) and [Line Diagram](#)
- Upload Section 10 (if applicable)

# Step 6: Engineering Review




**Next Action-** App Owner: Address Program Review requested adjustment(s) and select "Submit for Approval"

## Array and Inverter Details

|                                 |        |                              |        |
|---------------------------------|--------|------------------------------|--------|
| # of Panels                     | 80     | NamePlate Capacity (kW)      | 25.600 |
| # of Inverters                  | 2      | Total System Power kW Rating | 22.000 |
| Estimated Array Capacity (kW) ? | 25.600 | System PV Watts              | 39,214 |

- Application to this point must be reflective of the end product , changes are prohibited during engineering review
  - Changes desired after engineering approval will require a new application to be created or an exception request to be approved
  - Engineers have 15 business days to review applications once submitted

# Step 6: Engineering Review Cont...

| Action  | Date                | Status    | Assigned To                   | Actual Approver                   | Comments | Overall Status   |
|---|---------------------|-----------|-------------------------------|-----------------------------------|----------|--|
| Step: Engineering Review (Pending for unanimous approval) |                     |           |                               |                                   |          |  Pending  |
|   | 4/7/2017<br>4:00 PM | Pending   | <a href="#">Tom Malone</a>    | <a href="#">Tom Malone</a>        |          |  |
|   | 4/7/2017<br>4:01 PM | Approved  | <a href="#">Lisane Dinssa</a> | <a href="#">Elizabeth Klinger</a> |          |  |
| Approval Request Submitted                                |                     |           |                               |                                   |          |  |
|   | 4/7/2017<br>4:00 PM | Submitted | <a href="#">test user 1</a>   | <a href="#">test user 1</a>       |          |  |
| Step: Engineering Review                                  |                     |           |                               |                                   |          |  Rejected |
|   | 4/7/2017<br>3:57 PM | Rejected  | <a href="#">Lisane Dinssa</a> | <a href="#">Elizabeth Klinger</a> |          |  |
| Step: Verify Solar Rewards Opportunity                    |                     |           |                               |                                   |          |  Approved |
|   | 4/7/2017<br>3:50 PM | Approved  | <a href="#">CO SR Admin</a>   | <a href="#">Elizabeth Klinger</a> |          |  |

[Show 1 more »](#) | [Go to list \(6\) »](#)

- If approved by Engineering, the application will move on to Final Documentation
- If a rejection occurs, the installer will receive an email with further instructions wait until both engineers reply to re-submit for approval (if applicable)





# Step 7: Final Information


## Documents for Download

[Final Electrical Inspection Form](#)

## Final Application Details



Final Invoice Amount 

Restricted Access to Meter Area? 

Inspection Date   [ [9/28/2017](#) ]

PV/DG Installation Date   [ [9/28/2017](#) ]


## Documents to Upload

Please upload the documents listed below. Select the name of the document to upload, select the document file by clicking "Choose File", and click "Upload". Waiting for Upload:  Document Uploaded: 

Proof of Insurance  02/04/2017

Final Electrical Inspection  02/09/2017

Select document you want to upload:



Select document file:

Upload file:

- Final Application Details must be populated and saved before final documents can be uploaded
- Upload [Proof of Insurance](#), [Final Electric Inspection](#)

# Proof of Insurance

## “What does the Proof of Insurance need to include?”

- Effective policy dates (insurance must be currently active)
- Premise address (required if customer-owned system)
- Appropriate liability (personal or business general liability insurance) coverage: (based on AC NamePlate Capacity kW)
  - No less than \$300,000 per occurrence for systems 10kW and under
  - No less than \$1,000,000 per occurrence for systems 10.01kW – 500kW
  - No less than \$2,000,000 per occurrence for systems greater than 500kW
  - For systems over 500 kW, must include Public Service as an additional insured on the policy
- Such General Liability insurance shall include coverage against claims for damages resulting from (i) bodily injury, including wrongful death; and (ii) property damage arising out of the Customer’s ownership and/or operating of the Generation System under this Agreement.

# Final Electrical Inspection

**“What does the Final Electrical Inspection need to include?”**

- The premise address
- The name of the inspection agency (ex. City of Denver)
- The type of inspection (Final Electrical)
- The outcome of the inspection (Pass/Fail)
- The date of the inspection
- The inspector’s name and signature (electronic signature or initials are accepted)



## Step 7: Final Information Cont...

- Click “Retrieve Documents” button once the final information and documents have been uploaded

### Documents to Sign

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Click “Retrieve Documents” below to populate and send the final documents requiring your signature. Documents will be sent to the various signer email addresses defined on the contacts tab.

**Retrieve Documents**

- Once “Retrieve Documents” has been selected, no changes can be made to the application

# Step 7: Final Information Cont...

- Documents are fully signed when green checkmark shows next to the document
  - Solar\*Rewards applications have three documents to sign electronically

## Documents to Sign

| Status | Name                                 |   | Date Signed         |
|--------|--------------------------------------|---|---------------------|
| Signed | M-RETs Form                          | ✓ | 11/19/2017 11:09 AM |
| Signed | Solar*Rewards Acknowledgement Letter | ✓ | 4/15/2017 6:51 AM   |
| Signed | Solar*Rewards Contract               | ✓ | 11/19/2017 11:09 AM |

- DG Net Metering applications have one document to sign electronically

## Documents to Sign

| Status | Name                  |   | Date Signed        |
|--------|-----------------------|---|--------------------|
| Signed | Net Metering Contract | ✓ | 11/23/2016 9:51 AM |

# Restricted Meter Access


“If the customer has restricted access to the meters, what do I do?”


- Check “Restricted Access to Meter Area” checkbox
- Add an Application Note on the Application Summary tab detailing the restricted access (dogs, locked gate etc.)
- Email [SolarProgramMN@xcelenergy.com](mailto:SolarProgramMN@xcelenergy.com) if an appointment for meter installation needs to be made.




## Final Application Details

Final Invoice Amount  12,201.75

Restricted Access to Meter   Area?

Inspection Date  3/5/2015 [ 3/26/2015 ]

PV Installation Date  2/2/2015 [ 3/26/2015 ]

# Meter Order

## “How do I know when the meters are ordered?”

- The Production Meter Order Date on the Application Summary tab will populate when meters are ordered

### Meter Order Details

|                                 |                   |                          |                   |
|---------------------------------|-------------------|--------------------------|-------------------|
| Production Meter Order Date     | 9/21/2017 6:00 PM | Net Meter Order Date ?   | 9/21/2017 6:00 PM |
| Production Meter Install Date ? |                   | Net Meter Install Date ? |                   |
| Production Meter Number ?       |                   | Net Meter Number ?       |                   |

- Once meters are installed, the Production and Net Meter Install Dates and Numbers will populate in Meter Order Details

### Meter Order Details

|                                 |                   |                          |                   |
|---------------------------------|-------------------|--------------------------|-------------------|
| Production Meter Order Date     | 9/20/2017 6:00 PM | Net Meter Order Date ?   | 9/20/2017 6:00 PM |
| Production Meter Install Date ? | 9/25/2017         | Net Meter Install Date ? | 9/26/2017         |
| Production Meter Number ?       | 000082272703      | Net Meter Number ?       | 000082830505      |

- The general service meter will be replaced with a Net Meter, and a PV Production Meter will be added for any new solar interconnection

# Meter Installation Timeframe

- PV Production and Net Meters will be installed approximately **15 business days from meter order date**
- Any corrections or access issues will be noted at the premise by meter technician
- If correction(s) are needed, please email [SoarProgramMN@xcelenergy.com](mailto:SoarProgramMN@xcelenergy.com) once the correction is complete



## Solar\*Rewards

Greetings,  
We wanted to let you know that the net and production meters have been installed at the premise for application [{!Opportunity.Integration Opportunity ID\\_c}](#).

{!Premise\_Address\_c}, {!Premise\_City\_c}, {!Premise\_State\_c} {!Premise\_Zip\_c}

At this time, you may energize the system. The customer has also been informed of the meter installation via email. This email acts as the official permission to operate.

Thank you,  
Xcel Energy

\* System generated email, please do not respond



# Permission to Operate

**“How do I know when my Installer can energize my solar system?”**

## Solar\* Rewards

Greetings,  
We wanted to let you know that the net and production meters have been installed at the premise for application [{!Opportunity.Integration Opportunity ID\\_\\_c}](#).

{!Opportunity.Premise\_Address\_\_c}, {!Opportunity.Premise\_City\_\_c}, {!Opportunity.Premise\_State\_\_c}, {!Opportunity.Premise\_Zip\_\_c}

At this time, you may energize the system. The customer has also been informed of the meter installation via email. This email acts as the official permission to operate.

Thank you,  
Xcel Energy

\* System generated email, please do not respond

A Permission to Operate (PTO) email will be sent to the installer and customer after meters have been installed

# Assignment of Contract (AOC)

**“I’m moving. What do I need to do with my solar agreements?”**

- If you sell your home after the application process is complete, you may transfer the Contracts/Agreements to the new owner with an Assignment of Contract.
- The owner would assume responsibility for the terms of the contract
- The new homeowner needs to sign a new Interconnection Agreement with Xcel Energy to receive the benefits of the net-metered rate



# System Removals

- In the event that a system needs to be removed or relocated, please notify us by emailing [solarprogramm@xcelenergy.com](mailto:solarprogramm@xcelenergy.com)
- The Net and PV Production meters will be removed from the premise and the general service meter replaced
- If a system is going to be offline for more than 90 days, notify SolarProgram in writing so that the system does not automatically get flagged for non-production and have a meter removal order logged



# Extension Requests

- If you anticipate needing an extension for your project, please complete this form at least 2 weeks prior to the project expiration date [Solar\\*Rewards Extension Request Form \(PDF\)](#)

## Solar\*Rewards Application Extension Request Form

An Applicant or Installer must complete this form in order to request a one-time extension of 60 calendar days for a Solar\*Rewards application. Please submit completed form via email to [solarprogramm@xcelenergy.com](mailto:solarprogramm@xcelenergy.com).

### **Application Details:**

Application OID-

App Creation Date-

Customer Name-

PV Install Address-

# Revised Installation Standards



- The Xcel Energy Standard for Electric Installation and Use was revised on 8/15/17
  - Please make sure that all documents submitted include the correct revision date and section numbers

[Summary of Significant Changes \(PDF\)](#)

[https://www.xcelenergy.com/working\\_with\\_us/builders/installation\\_standards](https://www.xcelenergy.com/working_with_us/builders/installation_standards)

**ENFORCEMENT WILL BEGIN ON NOVEMBER 1st 2017**

# Capacity Screen Requests

- If you are interested in determining the capacity for a potential project at a certain site, you will need to submit a capacity screen request:
  - Sign NDA prior to receiving screen results
  - Provide map of anticipated Point of Interconnection
  - Complete a Capacity Screen SOW
  - \$250 payment per Interconnection Address (wire or check)
- Xcel Energy will provide results within 15 business days of the receipt of the completed request form and payment of all fees

## Forms:

- [Capacity Screening Form \(XLS\)](#)
- [Nondisclosure Agreement \(PDF\)](#)
- [Capacity Screen SOW \(PDF\)](#)
- [Map of MN Service Territories](#)

Completed forms should be sent to  
SRCMN@xcelenergy.com and  
NSPMNDGEng@xcelenergy.com

# Thank You!

Thank you for reading the 2018 Solar Installer Training

Still have questions? We are here to help!

Email: [SolarProgramMN@xcelenergy.com](mailto:SolarProgramMN@xcelenergy.com)



