



INTERCONNECTION APPLICATION PORTAL PROCESS GUIDE

**Xcel Energy | Colorado | Distributed Energy Resources (DER)
Process Guide for Installers & Developers**

May 2022

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CLICK ON EACH LINK TO JUMP TO THE SPECIFIC SECTION.

WELCOME TO THE 2022 DER PORTAL PROCESS GUIDE

GOAL: TO PROVIDE INSTALLERS AND DEVELOPERS WITH THE INFORMATION NECESSARY TO COMPLETE XCEL ENERGY'S DER INTERCONNECTION 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.



COMMITTED



CONNECTED



SAFE



TRUSTWORTHY

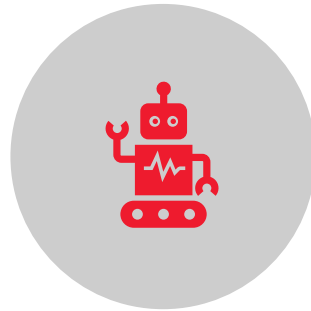
WHAT'S NEW?

The enhanced DER Application Portal is here!



ENABLEMENT

A SELF-SERVICE PORTAL GUIDED BY ACTIONS FOR EACH STEP OF THE INTERCONNECTION PROCESS.



AUTOMATION

SYSTEM TRIGGERS TO SEND ESIGN DOCUMENTS AND COMPLETE FORMS.



COMMUNICATION

CHATTER FEATURE TO SELECT TOPICS FOR DISCUSSION.



MILESTONE

CLEAR TIMELINES FOR EACH STEP THROUGHOUT APPLICATION PROCESS.

HOW TO USE THIS GUIDE

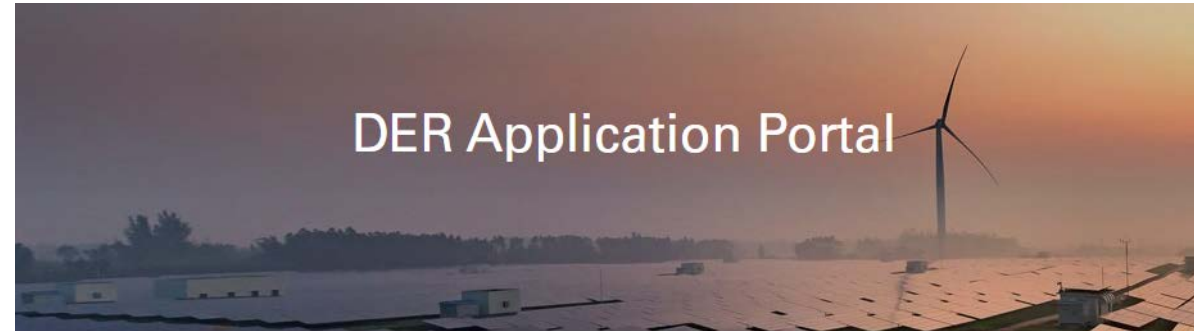
THIS GUIDE CAN BE USED TO SUBMIT INTERCONNECTION REQUESTS TO XCEL ENERGY'S GRID FOR CUSTOMER-SITED (BEHIND THE METER) INTERCONNECTIONS, SOLAR GARDENS, AND PRE-APPLICATION DATA REQUESTS.

SUBMIT APPLICATIONS FOR THE FOLLOWING DISTRIBUTED ENERGY RESOURCES (DER) FUEL TYPES:

SOLAR
ENERGY STORAGE
NATURAL GAS
DIESEL
HYDRO
WIND
BIOGAS
GEOTHERMAL


INSTALLERS AND CUSTOMERS: UNDERSTAND THE INTERCONNECTION APPLICATION PROCESS AND GET ANSWERS TO COMMON QUESTIONS.


“Interconnection request” means the interconnection customer's request, in accordance with any applicable utility tariff, to interconnect a new small generating facility, or to increase the capacity of, or make a material modification to the operating characteristics of, an existing DER that is interconnected with the utility's system.



Start a new Interconnection Application *Required

*Select State


Minnesota


Colorado

Open Applications	
Case Number	Program Type
04468680	Solar*Rewards
04468671	Solar*Rewards
04468670	Solar*Rewards
04468659	Solar*Rewards
04468645	Distributed Generation
04468644	Solar*Rewards Community
04468643	Solar*Rewards

INVOLVED PARTIES

XCEL ENERGY PROGRAM TEAM

- RENEWABLE CHOICE TEAM LEAD
- SOLAR PROGRAM MANAGERS
- SOLAR TRADE RELATIONS MANAGER
- MARKETING ASSISTANTS/COORDINATORS

INTERNAL TEAM PLAYERS

- CUSTOMER SERVICE/ENERGY EFFICIENCY REPRESENTATIVES
- BUILDERS CALL LINE
- METERING AND AREA ENGINEERING
- FIELD METERING
- BILLING

EXTERNAL INDUSTRY TEAM PLAYERS

- INSTALLER
- DEVELOPERS
- LOCAL CITY AND COUNTY INSPECTORS
- HOME BUILDERS
- FINANCERS



CUSTOMER COMMUNICATIONS



XCEL ENERGY COMMUNICATES WITH CUSTOMERS AT SEVEN KEY POINTS IN THE APPLICATION PROCESS, ONCE DURING EACH STAGE ILLUSTRATED IN THE GRAPHIC TO THE LEFT.

A CHECK MARK SIGNIFIES A COMPLETED STAGE. THE CURRENT APPLICATION STAGE IS THEN HIGHLIGHTED IN RED.

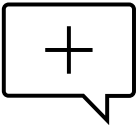
PLEASE REFER CUSTOMERS TO THE [APPLICATION PROCESS](#) WEBPAGE FOR A REVIEW OF THE PROCESS STEPS AND ASSOCIATED TIMELINES.

HELPFUL CUSTOMER DOWNLOADS:

- [SOLAR NET METERING AND BILLING INFO SHEET](#)
- SOLAR TIME OF USE (RETOU) FAQ
- [SOLAR BANK ELECTION FORM](#)
- [CO NEW HOMES ESTIMATOR TABLE](#)

INSTALLER COMMUNICATION EXPECTATIONS

Ways To Communicate with the Colorado Solar Interconnection Team



APPLICATION CHATTER
NOTES

SOLARPROGRAM@XCELENERGY.COM

SOLAR HOTLINE
303.571.SOLAR (7652)

THIS IS THE
PRIMARY WAY TO
COMMUNICATE WITH OUR
TEAM ABOUT
**ACTIVE APPLICATIONS
ONLY.**

EMAIL QUESTIONS RELATED TO
CANCELLED OR COMPLETED
APPLICATIONS, EQUIPMENT REQUESTS,
GENERAL INQUIRIES, AND
CUSTOMER QUESTIONS.




THE HOTLINE IS
MONITORED FROM
9AM – 3PM, MONDAY-
THURSDAY. **URGENT
REQUESTS ONLY PLEASE.**

DER INTERCONNECTION OPTIONS

WEBSITE LINKS:

- [SOLAR*REWARDS COMMUNITY](#)
- [SOLAR*REWARDS](#)
- [NET ENERGY METERING](#)
- [INTERCONNECTION DEVELOPER RESOURCES | XCEL ENERGY](#)
- [RENEWABLE ENERGY | XCEL ENERGY](#)

"Distributed energy resource" or "DER" means the interconnection customer's source of electric power connected to the utility's distribution grid, including retail renewable distributed generation, other small generation facilities for the production of electricity, energy storage systems, or combination of any of these elements, as identified in the interconnection request, but shall not include the interconnection facilities not owned by the interconnection customer.

INTERCONNECTION OPTIONS COMPARISON CHART			
	Solar*Rewards Community®	Solar*Rewards®	Net Energy Metering Without Incentives
Energy Source			
Earn Renewable Energy Credits (RECs)	No	No	Yes
Cost to Participate	Subscription fee paid to solar garden per contract terms	Pay solar installer for equipment per contract terms	Pay installer for equipment per contract terms
Financial Benefit	Bill credit payment for solar energy produced	Monthly energy use is offset by solar produced, plus incentive per kWh of solar	Monthly energy used is offset by solar produced
Typical Contract Length	Up to 20 Years	Up to 20 years	None
Potential to save money by participating	Varies depending on 3 rd party subscription terms	Varies depending on installation costs & financing / lease	Varies depending on installation costs & financing / lease
Increases costs for non-participating customers?	No	Yes	Yes
Install on-site equipment?	No	Yes	Yes
Contract With	Solar Garden Company	1) Solar Installer: equipment 2) Xcel Energy: interconnection & incentive	1) Installer: equipment 2) Xcel Energy: interconnection

HELPFUL CONTACTS

CUSTOMER ELECTRIC SERVICE/ACCOUNTS:

CUSTOMER SERVICE: 1-800-895-4999

CUSTOMER RATES, ELECTRIC BILLS, SOLAR INCENTIVE PAYMENTS:

RESIDENTIAL CUSTOMERS

CUSTOMER SERVICE: 1-800-895-4999

ASK TO SPEAK WITH AN ENERGY EFFICIENCY REPRESENTATIVE

COMMERCIAL CUSTOMERS

BUSINESS SOLUTIONS CENTER (BSC): 1-800-839-8862

METERING INSTALLATION STANDARDS:

METERING SHOP: 1-800-422-0782

CHOOSE OPTION 1, OPTION 1



CUSTOMER-SITED INTERCONNECTION OPTIONS

Net Energy Metering (NEM) or Solar*Rewards

NET ENERGY METERING (NEM)	SOLAR*REWARDS
<p>Net Energy Metering (NEM) is a service element that can offset the Customer's electric consumption by selling back the excess electricity generated from the solar system using a single net meter.</p> <ul style="list-style-type: none">• A net meter is a bidirectional meter that measures the flow of electric energy in both directions.• All solar customers receive NEM benefits.• When the system produces more energy than is needed, the extra energy is added to our grid. Any excess is held in the Customer's virtual bank to be applied against future electric bills. <p>Selling back excess generation is subject to Rules and Regulations on file with the local utility commission or regulatory body.</p>	<p>Solar*Rewards is a production-based incentive program. Participating customers receive NEM benefits as well. Monthly or annual payments are made to the owner of the solar system in exchange for <u>Renewable Energy Credits (RECs)</u> for the energy produced by the solar system.</p> <ul style="list-style-type: none">• Incentive payments are based on how many kWh the solar system produces or expected to produce each month.• Systems with a production meter have incentives paid based on actual production as captured in the PV PROD account.• Systems without a production meter (10kW DC and less), are paid annually based on the kWh estimate from the <u>NREL PV Watts</u> value listed in the solar application.

CUSTOMER-SITED SYSTEMS

Eligibility

MUST BE AN XCEL ENERGY RESIDENTIAL OR BUSINESS ELECTRIC CUSTOMER.

MUST HAVE AN ACTIVE AND VALID ACCOUNT NUMBER AND PREMISE NUMBER.

THE CUSTOMER'S NAME ON THE APPLICATION MUST MATCH THE NAME ON THE XCEL ENERGY ACCOUNT/BILL.

ALL INVERTER EQUIPMENT MUST BE UL 1741 CERTIFIED AND LISTED WITHIN THE SOLAR EQUIPMENT LISTS ON THE CALIFORNIA ENERGY COMMISSION WEBSITE

MUST PROVIDE GENERAL LIABILITY INSURANCE FOR EACH OCCURRENCE BASED ON THE GROSS AC NAMEPLATE RATING OF THE GENERATION SYSTEM 1 MW AC AND LARGER. FOR INVERTER-BASED GENERATING FACILITIES:

- NAMEPLATE RATING > 5 MW \$2,000,000 FOR EACH OCCURRENCE
- 1 MW < NAMEPLATE RATING > 5 MW \$1,000,000 FOR EACH OCCURRENCE
- NAMEPLATE RATING < 1 MW NO INSURANCE

SYSTEMS MUST BE SIZED SUCH THAT THE EXPECTED GENERATION (PV WATTS ESTIMATE) WHEN COMBINED WITH OTHER DISTRIBUTED GENERATION RESOURCES SERVING THE SERVICE ADDRESS, DOES NOT EXCEED 200% OF HISTORICAL OR EXPECTED CONSUMPTION (I.E. THE PREVIOUS 12 MONTHS AT THE TIME OF APPLICATION SUBMISSION).







SOLAR GARDEN INTERCONNECTION OPTIONS

Solar*Rewards Community Program

VISIT THE [SOLAR*REWARDS COMMUNITY](#) WEBPAGE FOR THE CURRENT PROGRAM OFFERINGS.

WE'VE COMPILED HELPFUL INFORMATION AND RESOURCES FOR DEVELOPERS INTERESTING IN TAKING PART IN THE SOLAR*REWARDS COMMUNITY® PROGRAM.

Developer Resources

- [? Program Policies, Requirements, and Guidelines](#) 
- [? Sample Documents and Forms](#) 
- [? Additional Information & Tariffs](#) 
- [? Hosting Capacity Resource](#) 
- [? 2020 RFP Resources](#) 
- [? 2021 RFP Resources](#) 

DER APPLICATION BASICS

Home Screen, Basics, Tips and Tricks





APPLICATION BASICS

Home Screen Features

Link to Interconnection Resources webpage

View, Sort, and Access all your Applications

View, Sort, and Access all your Solar Garden records

View all your portal user contact details: Name, Phone, Email

View your Solar Garden Owner Reports

Home Screen



Start a new Interconnection Application

*Select State

*Required

Open Applications

Case Number	Program Type
04468890	Distributed Generation
04468886	Distributed Generation

APPLICATION BASICS

Managing Applications on Home Screen

Xcel Energy | How to Interconnect | **Applications** | Solar Gardens | User Management | Solar Gardens Reports

Interconnection Applications
Open Applications ▾

50+ items • Sorted by Track • Filtered by All interconnection applications • Updated 2 minutes ago

Search and Sort your Applications

Search this list...

Case Number ▾	Program Type ▾	Product ▾	Customer Full ... ▾	Customer Address ▾	Current Status / Step ... ▾	Track ↓ ▾	Created Date ▾
04388422	Distributed Generation	CO - Distributed Energy Resou...	SCOTT MILLER	1800 Larimer St, Denver Colorado, 80202	Initiate Application / Draft	Study	1/27/2022 3:14 ...
04388410	Distributed Generation	CO - Distributed Energy Resou...	264264264a67a67...	1800 Larimer St, Denver Colorado, 80202	Initiate Application / Draft	Study	1/26/2022 11:50 ...
04385730	Solar*Rewards Community	Solar*Rewards Community - ...	Joe Conservation	101 Norwood Drive, Big Lake Minnesot...	Interconnection Agreem...	Study	5/11/2021 4:00 ...
04387896	Solar*Rewards	2021 Solar*Rewards Residential	CATXXXXX SEA...	101 Norwood Drive, Big Lake Minnesot...	Withdrawn /	FastTrack	8/29/2021 5:41 ...

APPLICATION BASICS

Case Numbers, Statuses, and Actions

CASE NUMBER:

- A CASE NUMBER IS A UNIQUE IDENTIFYING NUMBER SPECIFIC TO YOUR APPLICATION

STATUS/ STEP/ SUB-STEPS:

- EACH CASE WILL HAVE A “STATUS”, “STEP”, AND “SUB-STEP” IDENTIFYING THE STAGE IN THE PROCESS
- APPLICATIONS WILL ALWAYS HAVE A STATUS/ STEP
- SUB-STEPS ARE ONLY APPLICABLE TO SOME STATUS/ STEPS

EACH “ACTION” WILL BE IN THE “OPEN”, “DRAFT”, OR “FINALIZED” STATUS.

OPEN:

- APPLICATION AGENT/INSTALLER’S RESPONSIBLY TO COMPLETE

DRAFT:

- APPLICATION AGENT/INSTALLER HAS COMPLETED THE ACTION BUT NOT YET SUBMITTED

FINALIZED:

- ACTION ITEM HAS BEEN COMPLETED AND SUBMITTED TO XCEL ENERGY FOR REVIEW

THE BASICS

Status, Step, Substep

- WHEN AN APPLICATION MOVES TO THE NEXT SSS, (WHEN “SAVE & CONTINUE” IS CLICKED) THE EXISTING MILESTONE WILL BE MARKED AS COMPLETE, AND A NEW MILESTONE WILL BE TRIGGERED.
- THE APPLICATION CANNOT MOVE TO THE NEXT SSS IF THERE ARE OPEN ACTIONS. “SAVE & CONTINUE” CAN ONLY BE CLICKED WHEN ALL ACTIONS ARE IN “DRAFT STATUS”

STATUS, STEP, SUBSTEP (“SSS”) REFERS TO THE STAGE THAT THE APPLICATION IS CURRENTLY IN.

ACTIONS ARE TRIGGERED BY SSS.

Case #: 04388523
Status: Initiate Application
Step: Draft
Sub-Step:
App Owner: Please enter contact information, system and application details, and other ancillary actions before continuing.

[Save & Continue](#)

Actions Finalized Actions Milestones Completed Milestones Application Details

ACTION NAME	DESCRIPTION	STATUS	RESPONSIBLE PARTY	REQUIRED?	ACTION
Application Details	Please complete supplemental fields to complete your application.	Draft	Applicant	<input checked="" type="checkbox"/>	Action
Contact Information	Please provide information about the contacts associated with your application	Draft	Applicant	<input checked="" type="checkbox"/>	Action

APPLICATION BASICS

Finalized Actions, Milestones and Application Details

Actions	Finalized Actions	Milestones	Completed Milestones	Application Details
>	Application Information			
>	Interconnection Customer Information			
>	Application Agent/Company Information			

ACTION NAME	DESCRIPTION
Application Deposit Fee	Please pay the Application Deposit Fee through online payment to advance your application to the next step
Application Details	Please complete supplemental fields to complete your application.
Contact Information	Please provide information about the contacts associated with your application
Engineering Process Fee	Please pay the Engineering Process Fee through online payment to advance your application to the next step.

TITLE	DESCRIPTION
Application Timeline- S*R Small	You have 12 months to complete your application before it is automatically withdrawn
Sign the Interconnection Agreement	App Owner: Please sign your interconnection agreement within 30 business days

TITLE	DESCRIPTION	RESPONSIBLE
PMO Review	Xcel Energy PMO to review material and notify applicant within 3 business days	Xcel Energy
Completeness Review	Xcel Energy to complete "deemed completeness" review within 10 Business Days	Xcel Energy
Deemed Complete Date	The "deemed complete" date for queue position and regulatory reporting has been captured.	Xcel Energy

APPLICATION BASICS

Tips and Tricks

01

ACTIONS WILL OPEN
IN A **NEW TAB**.

02

BE SURE TO CLICK
"**SUBMIT**" ON THE
LAST SCREEN OF
THE ACTION TO
SAVE YOUR
CHANGES.

03

ONCE AN ACTION IS
COMPLETED, CLOSE
TAB AND RETURN
TO THE HOME
SCREEN. **REFRESH**
THE URL OF THE
HOME SCREEN
TO SEE CHANGES.

04

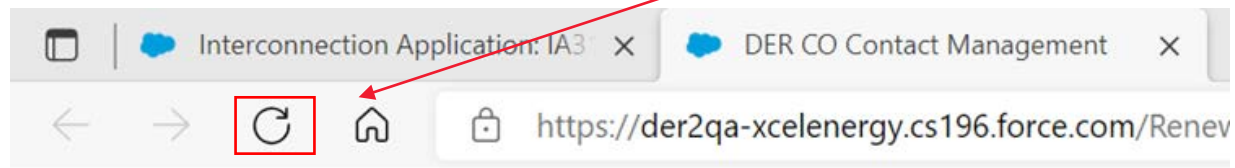
VIEW **COMPLETED**
MILESTONES,
FINALIZED
ACTIONS, AND
APPLICATION
DETAILS IN OTHER
TABS ON THE HOME
SCREEN.

05

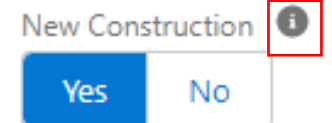
BE SURE TO
"**SUBMIT**" ONCE ALL
ACTIONS ARE IN
DRAFT TO ENSURE
THE APPLICATION IS
IN XCEL ENERGY'S
QUEUE FOR
REVIEW.

06

HOVER OVER THE
"i" BESIDE FIELD
NAMES TO VIEW
HELP TEXT.



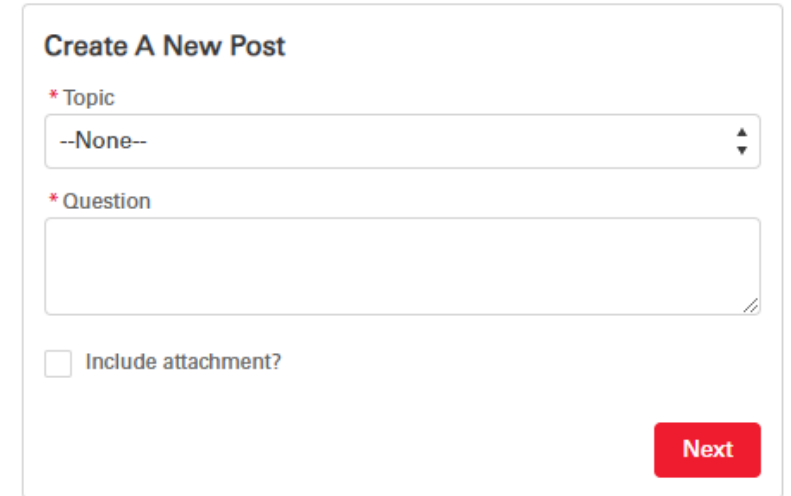
Your contact information has been saved.



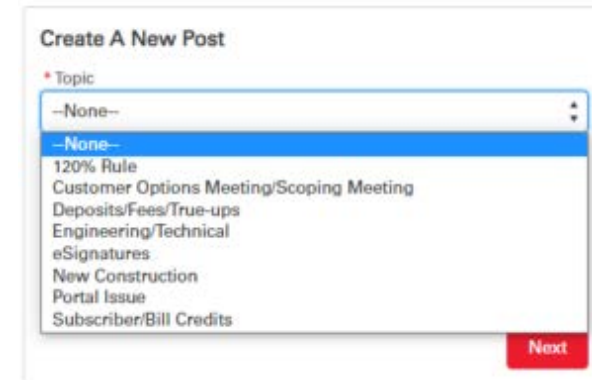
APPLICATION COMMUNICATION

Chatter Feature

- USE THE CHATTER FEATURE TO COMMUNICATE AND PROVIDE ADDITIONAL ATTACHMENTS TO YOUR APPLICATION.
- SELECT A TOPIC AND TYPE IN YOUR QUESTION AND CLICK "NEXT" TO SEND A MESSAGE TO THE XCEL ENERGY PROGRAM TEAM.
- ALL MESSAGE WILL BE TRACKING AND BECOME PART OF THE APPLICATION RECORD.
- THIS IS THE PREFERRED WAY TO COMMUNICATE WITH THE XCEL ENERGY TEAM!
- **TOPIC SELECTIONS:**
 - 200% RULE (FOR CO)
 - CUSTOMER OPTIONS MEETING/SCOPING MEETING
 - DEPOSITS/FEES/TRUE-UPS
 - ENGINEERING/TECHNICAL
 - ESIGNATURES
 - NEW CONSTRUCTION
 - PORTAL ISSUES
 - SUBSCRIBER/BILL CREDITS



The screenshot shows a form titled "Create A New Post". It has two main input fields: a dropdown menu for "Topic" currently showing "--None--" and a text area for "Question". Below the text area is a checkbox labeled "Include attachment?". A red "Next" button is located in the bottom right corner of the form.



This screenshot shows the same "Create A New Post" form, but with the "Topic" dropdown menu open. The menu lists several options: "--None--", "120% Rule", "Customer Options Meeting/Scoping Meeting", "Deposits/Fees/True-ups", "Engineering/Technical", "eSignatures", "New Construction", "Portal Issue", and "Subscriber/Bill Credits". A red "Next" button is visible in the bottom right corner.

AC VS DC SYSTEM SIZES

What factors in the application are determined by AC or DC system sizes?

AC ACTIVE POWER NAMEPLATE RATING (KW)	SYSTEM CAPACITY KW (DC NAMEPLATE RATING)
<ul style="list-style-type: none">• Application Fee (initial Study Fee)<ul style="list-style-type: none">○ \$100 for systems ≤ 10 kW○ \$1,000 for systems > 10 kW-250 kW○ \$2,000 for systems > 250 kW-2 MW• SGIA Requirement<ul style="list-style-type: none">○ Required for systems > 25 kW• Insurance Requirement<ul style="list-style-type: none">○ Personal Liability coverage required for systems 1 MW AC and larger	<ul style="list-style-type: none">• Program Type<ul style="list-style-type: none">○ Eligibility for the Small (0.5 kW – 25 kW), Medium (25.01 kW – 500 kW), and Large (500.01 kW and greater up to 200% of customer's annual load)• Site Plan & Line Diagram DC system size must match application to proceed to Engineering Review

APPLICATION PROCESS

How to submit and complete an application.



Application Process & Timeline

Step 1

Initiate Application: Solar Installer begins application in the portal and enters key information for the project. The 200% Rule will be automatically evaluated based on the system details entered. If manual evaluation is needed, the Solar Team will provide its review within 3 business days.

Step 2

Program Review: After receiving the required application fees, the Solar Team will complete a high-level review of the Site Plan and Line Diagram within **2 business days**. Once approved, the application is sent to our engineers for Engineering Review.

Step 3

Completeness Review: Xcel Energy engineers will review the Site Plan and Line Diagram to determine if the plans meet the guidelines set forth within **10 business days**. Subsequent reviews have a 10 business day timeline.

Step 4

Engineering Review: Xcel Energy engineers will perform an in-depth review of the proposed system within 10 business days for systems under 10kW DC and 15 business days for systems 10kW DC and larger. Further studies may be required that add additional time and cost to the review. **Xcel Energy highly recommends that the system is not installed until the application has passed all engineering screens.**

Step 5

Study Process: If Xcel Energy determines further study is needed or upgrades will be required, the application will enter into the Study Process. Fees and timelines will vary depending on the study.

Step 6

Interconnection Agreements: Solar Agreements are sent to the Interconnection Customer and Solar Installer for signature. Xcel Energy will countersign the documents within **2 business days** after receiving Customer and Installer signatures.

Step 7

Design and Construction: Final electrical inspection and NABCEP form (Solar*Rewards applications only) are uploaded to the application portal. The Solar Team will review the final documents and Solar Agreements within **3 business days**.

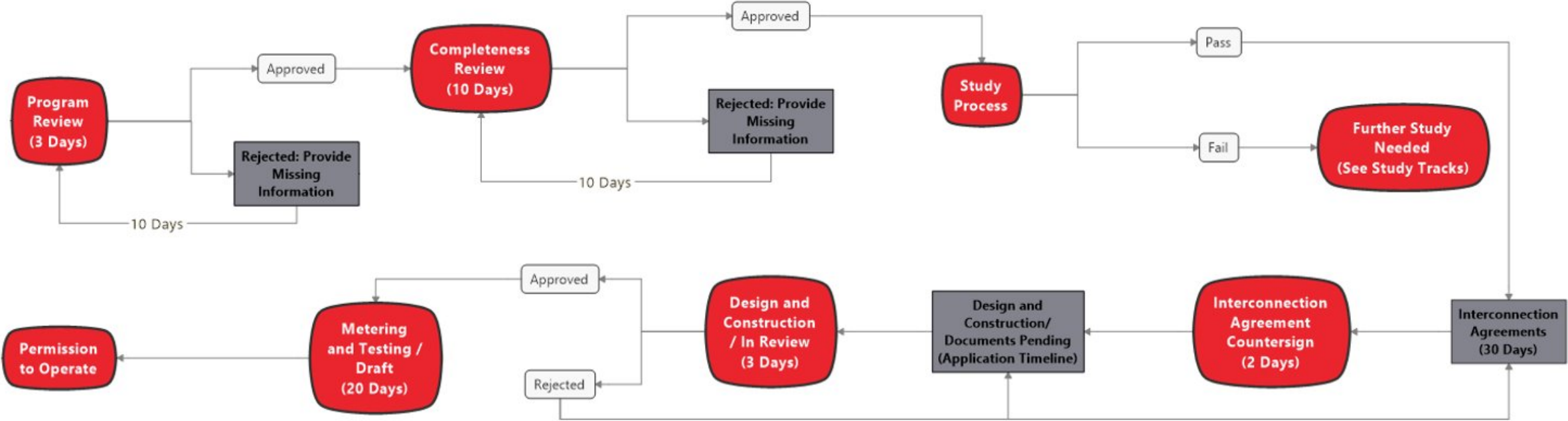
Step 8

Metering & Testing: The Solar Team will request your meter(s) if the final documents and Solar Agreements meet program requirements. A meter technician will attempt to install/review the metering within 20 business days of the Solar Team initiating your meter request.

Step 9

Permission to Operate: The meter technician will leave a door hanger, indicating the appropriate meters have been installed/reviewed and giving the customer permission to operate (PTO). Within a few days of completed meter installation/review, the customer and installer will also receive an automated email from the application portal, granting PTO of the solar system.

APPLICATION PROCESS FLOW CHART



Legend	
	Xcel Energy Task
	Application Agent Task

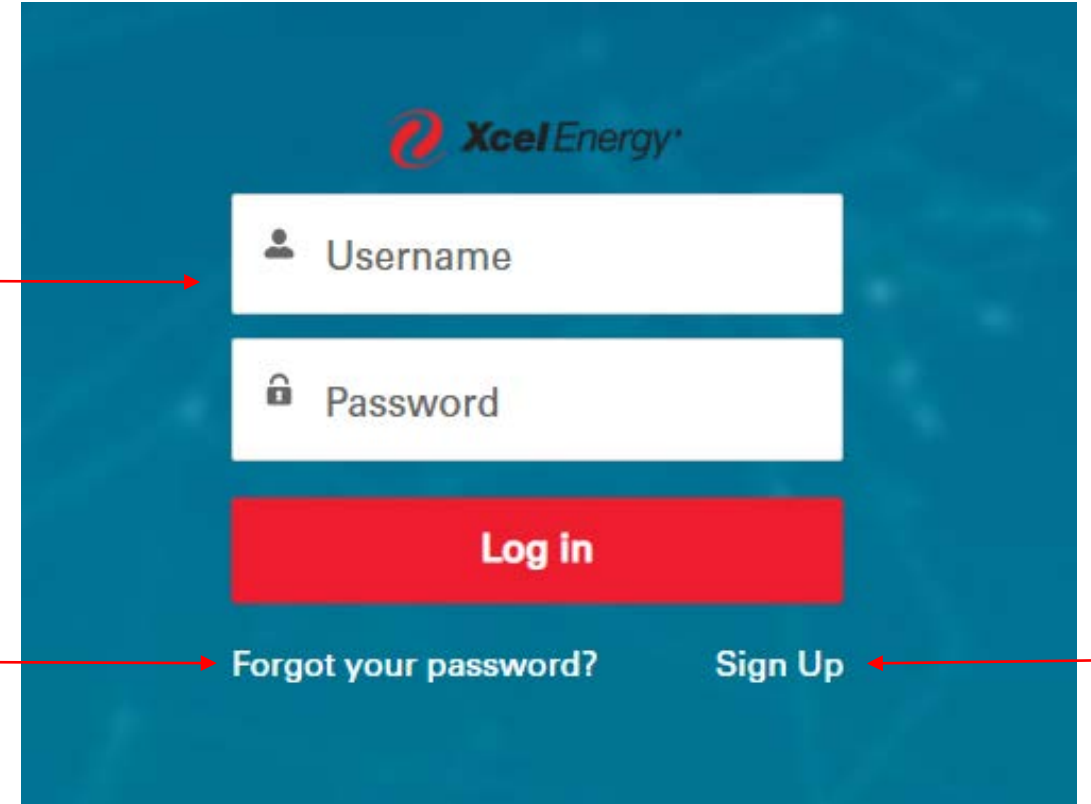
MILESTONES/TIMELINES

Status	Step	Title	Description	Days Allowed
Program Approval	In Review	Program Approval Review	Xcel Energy to review material and notify applicant within 3 business days	3
Initiate Application	Draft	Application Timeline	App Owner: You have 18 months to complete your application before it is automatically withdrawn.	547.5
Initiate Application	In Review	Completeness Review	Xcel Energy to complete "deemed completeness" review within 10 Business Days	10
Initiate Application	In Review	Completeness Review	Xcel Energy to review additional material and notify applicant within 10 Business Days	10
Initial Engineering Screens	In Review	Level 1 Screens (Simplified)	Xcel Energy to complete Level 1 (Simplified Track) screens within 10 days after "deemed complete" Business Days	20
Initial Engineering Screens	In Review	Level 2 Initial Review Screens (Fast-Track)	Xcel Energy to complete Level 2 Initial Review (Fast-Track) screens within 15 Business Days after "deemed complete"	15
Initial Engineering Screens	Customer Options Meeting	Schedule a Customer Options Meeting (optional)	App Owner: You can choose to schedule a Customer Options Meeting or agree to omit and move on to the next step within 10 business days.	10
Initial Engineering Screens	Pending Applicant Decision	Initial Review Decision	App Owner: Please make a decision on how to proceed with your application based on Initial Review Screen results within 5 Business Days.	5
Supplemental Review	Submitted	Supplemental Review Screens	Xcel Energy to complete Supplemental Review Screens within 30 Business Days after receipt of deposit.	30
Supplemental Review	Failed Supplemental Review	Supplemental Review Decision	App Owner: Please indicate whether you would like Xcel Energy to proceed with the Level 3 process within 5 Business Days	5
System Impact Study	Scoping Meeting	Schedule a Scoping Meeting (Optional)	App Owner: You can choose to schedule a scoping meeting or agree to omit and move on to the next step within 10 business days after Interconnection request completion.	10
Supplemental Review	Pending Study Authorization	Study Process Decision	App Owner: Please indicate whether you would like to proceed with moving your application into the study process within 10 Business Days	15
System Impact Study	In Review	View the System Impact Study Agreement	App Owner: Please view your System Impact Study Invoice within 30 business days.	20

STEP 1: INITIATE APPLICATION

Sign In & Registration

- **ALREADY HAVE AN ACCOUNT? USE EXISTING CREDENTIALS TO SIGN IN.**
 - USERNAMES WILL ALWAYS END IN @XCELENERGYSOLARREWARDS.COM
- **FORGOT YOUR USERNAME?**
 - EMAIL SOLARPROGRAM@XCELENERGY.COM TO RECEIVE A LINK TO RESET YOUR PASSWORD.
- **DON'T HAVE AN ACCOUNT? CLICK "SIGN UP" TO CREATE YOUR ACCOUNT.**
 - YOU WILL ONLY NEED TO REGISTER ONCE.



The image shows a login and registration interface for Xcel Energy. At the top, the Xcel Energy logo is displayed. Below the logo are two input fields: 'Username' and 'Password'. The 'Username' field has a person icon on the left, and the 'Password' field has a lock icon on the left. Below these fields is a red button labeled 'Log in'. At the bottom of the interface, there are two links: 'Forgot your password?' and 'Sign Up'. Red arrows point from the text in the list to these elements: one arrow points to the 'Username' field, another points to the 'Forgot your password?' link, and a third points to the 'Sign Up' link.

STEP 1: INITIATE APPLICATION

Logging In & Registration

Xcel Energy

Join the community to receive personalized information and customer support.

Self Register

* Registration Type

Installers & Developers
Create an Installer/Developer login in order to manage my customers' applications

Xcel Energy Customers
I am an Xcel Energy Customer who will be managing my own application

* First Name

* Last Name

* Email

* Confirm Email

Search Company

Search...

Register/Save

[Already have an account?](#)

- SELECT THE APPROPRIATE REGISTRATION TYPE, FILL IN THE REQUIRED INFORMATION, AND CLICK "REGISTER/SAVE."
- PLEASE BE SURE TO REGISTER UNDER YOUR RESPECTIVE COMPANY NAME, IF APPLICABLE.
- NO MORE THAN 5 USERNAME/PASSWORD/ACCOUNTS SHOULD BE USED FOR AN ENTIRE ORGANIZATION.
- YOU WILL ONLY NEED TO REGISTER ONCE. PLEASE TAKE NOTE OF YOUR USERNAME/PASSWORD.
- USERNAMES WILL ALWAYS END IN **@XCELENERGYSOLARREWARDS.COM**

STEP 1: INITIATE APPLICATION

Starting an Application

Start a new Interconnection Application

*Select State ← *Required

Minnesota Colorado

*Select Application Type ← *Required

Application

Next

Other DER Links

- [NM Solar Rewards Portal](#)
- [WI New Solar Garden Form](#)
- [WI Solar Garden Portal](#)

Open Applications

Case Number	Program Type
04468881	Solar*Rewards
04468859	Solar*Rewards Community
04468857	Solar*Rewards
04468856	Distributed Generation
04468855	Distributed Generation
04468854	Solar*Rewards Community
04468853	Distributed Generation
04468852	Solar*Rewards
04468851	Solar*Rewards
04468806	Solar*Rewards
04468884	Distributed Generation
04468683	Solar*Rewards
04468682	Solar*Rewards
04468680	Solar*Rewards
04468671	Solar*Rewards

View All

APPLICATION PORTAL HOMEPAGE

TO START AN APPLICATION:

1. SELECT STATE
2. SELECT APPLICATION TYPE (APPLICATION OR PADR)
3. CLICK NEXT

IN-PROGRESS APPLICATIONS:

OPEN APPLICATIONS ARE AVAILABLE TO THE RIGHT OF THE HOME SCREEN

OR

CLICK "VIEW ALL" AT THE BOTTOM OF THE SCREEN TO VIEW ALL APPLICATIONS.

STEP 1: INITIATE APPLICATION


Starting an Application

Start a new Interconnection Application


Selected State: **Colorado**

Selected Application Type: **Application**

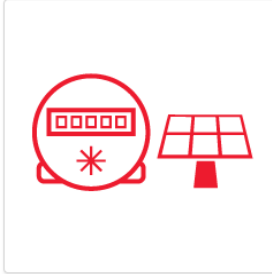
*Select Program Type ←



Solar*Rewards



Solar*Rewards Community



Distributed Generation

Back Next

- SELECT PROGRAM TYPE AND CLICK "NEXT."

*Required

* Product Type
--None--

* Address

* City

* County
--None--

* Zip Code

Back Save

- SELECT PRODUCT TYPE AND ENTER OTHER REQUIRED INFORMATION THEN CLICK "SAVE".
- REQUIRED FIELDS ARE INDICATED WITH A RED ASTERISK.

STEP 1: INITIATE APPLICATION

Starting an Application

Congratulations, you successfully started your interconnection application.

Your application number is 04390374

Click "View Application" to start submitting your interconnection application details.

[View Application](#)

Click "New Application" to start a new interconnection application.

[New Application](#)

Other DER Links

- [NM Solar Rewards Portal](#)
- [WI New Solar Garden Form](#)
- [WI Solar Garden Portal](#)

- TAKE NOTE OF YOUR APPLICATION NUMBER (AKA "CASE NUMBER"). THIS IS THE UNIQUE IDENTIFYING NUMBER FOR THIS APPLICATION.
- TO CONTINUE ENTERING INFORMATION ON YOUR NEW APPLICATION CLICK "VIEW APPLICATION."
- TO START A NEW APPLICATION, CLICK "NEW APPLICATION."

STEP 1: INITIATE APPLICATION

Starting an Application

HAVING THE CUSTOMER'S MOST RECENT UTILITY BILL ON HAND WHEN APPLYING FOR A SOLAR APPLICATION IS HIGHLY ADVISED.

ACCOUNT NUMBER:

- MUST BE A PERMANENT ACCOUNT NUMBER.
- ONLY ENTER THE NUMBERS IN BETWEEN THE DASHES.
- DO NOT ENTER ANY LEADING ZEROS.

PREMISE NUMBER:

- MUST BE A PERMANENT PREMISE NUMBER.
- TEMP ACCOUNTS ARE NOT PERMITTED.

Interconnection Customer
(Customer Contact/System Owner)

* Customer Account Number ⓘ

Only numeric values are allowed

* Customer Premise Number ⓘ

Next

SERVICE ADDRESS	ACCOUNT NUMBER	DUE DATE
CUSTOMER NAME STREET ADDRESS CITY, ST 88888-8888	53-#####-3	03/16/2022
	#####	AMOUNT DUE
	02/24/2022	\$113.53

STEP 1: INITIATE APPLICATION

Actions to Complete

Draft	Esignatures and Payments	Prepare Documents
Contact Information	Engineering Process Fee	One-Line Diagram
System Details	Application Deposit Fee (Solar*Rewards and Solar*Rewards Community)	Site Plan
200% Rule Support Documentation (200% Fails)	Solar Bank Election Form (Solar*Rewards and DG only)	UL 1741 Listing
Application Details	Meter Collar Waiver (if using)	SGIA (>25kW AC)
Tenant and Landlord Release Form (Rental Property)		Deposit Escrow Confirmation (Solar*Rewards Community)
Declaration (Energy Storage Included)		
Battery Details (Energy Storage Included)		
UL 1741 Listing (Inverter listing)		

STEP 1: INITIATE APPLICATION

Contacts

- CLICK THE "ACTION" BUTTON TO ENTER CONTACT INFORMATION.
- ENTER REQUIRED INFORMATION UNTIL YOU REACH THE FINAL PAGE, ENSURE YOU CLICK "SUBMIT."
- RETURN TO THE CASE HOMEPAGE AND CLICK REFRESH. YOUR ACTION SHOULD NOW BE ON "DRAFT" STATUS.
- ONCE ALL ACTIONS ARE IN DRAFT, CLICK "SAVE & CONTINUE" TO MOVE TO THE NEXT STAGE IN THE PROCESS.

Case #: 04468886
Status: Initiate Application
Step: Draft
Sub-Step:
App Owner: Please enter contact information, system and application details, and other ancillary actions before continuing.

[Save & Continue](#)

[Actions](#) [Finalized Actions](#) [Milestones](#) [Completed Milestones](#) [Application Details](#)

ACTION NAME	DESCRIPTION	STATUS	RESPONSIBLE PARTY	REQUIRED?	ACTION
Contact Information	Please provide information about the contacts associated with your application	Open	Applicant	<input checked="" type="checkbox"/>	Action

STEP 1: INITIATE APPLICATION

Contacts

- **CUSTOMER METER NUMBER:** NOT A REQUIREMENT TO START AN APPLICATION.
 - PLEASE POPULATE IF THE METER NUMBER IS AVAILABLE.
- **LEGAL ENTITY NAME:** USE IF THE “XCEL ENERGY ACCOUNT NAME” IS *NOT* THE CUSTOMER’S LEGAL NAME.
 - RE-TYPE THE ACCOUNT NAME IF THE NAME IS CORRECTLY DISPLAYED.
- **PHONE NUMBERS** MUST BE 10 NUMERIC CHARACTERS AND MUST BE IN XXX-XXX-XXXX FORMAT.
- **EMAIL:** USE THE CUSTOMER’S PRIMARY EMAIL ADDRESS. ALL ESIGNATURES WILL BE SENT TO THIS EMAIL.
 - THE CUSTOMER EMAIL ADDRESS *MUST* DIFFER FROM THE APPLICATION AGENT.
- **IS THIS A RENTAL PROPERTY?:** CHECK IF THE PROPERTY HAS A CURRENT TENANT.
 - LANDLORD INFORMATION WILL BE ENTERED ON THE NEXT SCREEN.

Interconnection Customer
(Customer Contact/System Owner)

Customer Meter Number

* Xcel Energy Account Name ⓘ
JESSICA R MITCHELL

* Legal Entity Name ⓘ

* Phone

* Email ⓘ

Primary Contact Name ⓘ

* Is the mailing address the same as the interconnection location?
--None--

Is this a rental property?

Back

STEP 1: INITIATE APPLICATION

System Details

Site Details

- **SERVICE VOLTAGE:** ENTER SERVICE VOLTAGE FOR THE PREMISE.
- **NEW CONSTRUCTION:** ENTER YES **ONLY** IF THE BUILDING/HOME IS A BRAND-NEW STRUCTURE.
- **ELECTRIC VEHICLE CHARGED AT PREMISE:** IF AN EV HAS BEEN PURCHASED WITHIN THE LAST 365 DAYS, PLEASE CHOOSE YES.
- **EXISTING PV SYSTEM:** ENTER YES **ONLY** IF THE EXISTING PHOTOVOLTAIC SYSTEM IS REMAINING AT THE PREMISE IN ADDITION TO THE CURRENT APPLICATION.
- **EXISTING DG SIZE (AC KW):** ENTER THE EXISTING PHOTOVOLTAIC SYSTEM'S SIZE IN AC KW.

* Service Voltage

--None--

New Construction ⓘ

Yes

No

Electric Vehicle Charged at Premise ⓘ

Yes

No

Existing PV System ⓘ

Yes

No

Existing DG Size (AC kW) ⓘ

STEP 1: INITIATE APPLICATION

System Details

- **ESTIMATED PROJECT COST:** ENTER THE ESTIMATED PROJECT COST AS ACCURATELY AS POSSIBLE.
- **SYSTEM INVERTER PHASE:** INDICATE IF THE PROPOSED SYSTEM WILL BE ONE PHASE OR THREE PHASE
- **CT CABINET NEEDED:** IF THE PROPOSED SYSTEM WILL REQUIRE A CT CABINET, CHOOSE YES. CT CABINETS ARE ONLY REQUIRED FOR LARGER SYSTEMS (TYPICALLY 100 KW DC AND ABOVE).

System Details

*Estimated Project Cost

*System Inverter Phase

One Phase Three Phase

CT Cabinet Needed

Yes No

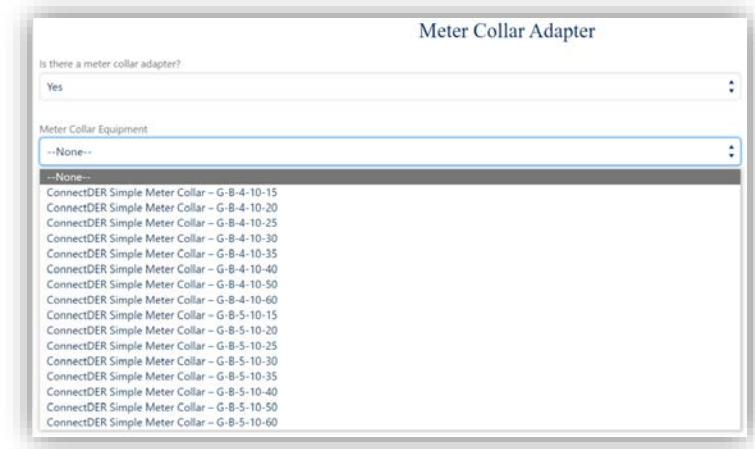
System Replacement & Expansion

Back Next

STEP 1: INITIATE APPLICATION

Meter Collar Adaptors

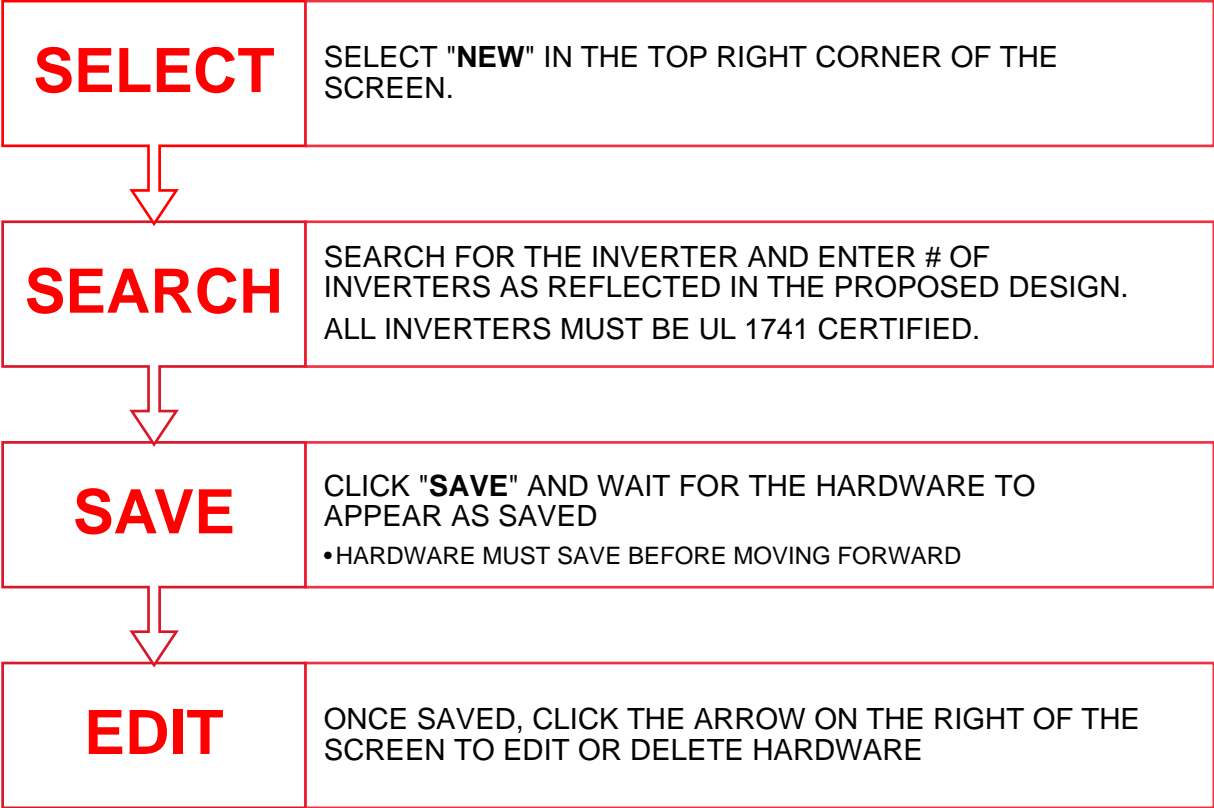
- *CERTAIN* METER COLLAR ADAPTORS HAVE BEEN APPROVED FOR USE IN XCEL ENERGY COLORADO TERRITORY.
- THE PROCESS FOR METER COLLAR ADAPTOR APPROVAL IS IN THE SECTION 2.8 CUSTOMER OWNED METER EQUIPMENT RESTRICTIONS ITEM 4, EXCEPTION 1 OF THE [XCEL ENERGY STANDARD FOR ELECTRIC INSTALLATION AND USE](#) MANUAL DATED DECEMBER 31, 2021.
- ONLY APPROVED METER COLLARS ARE ADDED TO THE APPLICATION PORTAL DATABASE.
- THE METER COLLAR INFORMATION IS REQUIRED TO BE **DOCUMENTED ON THE ONE-LINE DIAGRAM**. IF AN APPLICATION IS USING A NON-APPROVED METER COLLAR, THE APPLICATION WILL BE REJECTED BY METERING ENGINEERING.
- PSCO APPROVED METER COLLAR ADAPTORS IS LISTED ON [INTERCONNECTION DEVELOPER RESOURCES](#) UNDER TECHNICAL REQUIREMENTS AND DOCUMENTS.
- VIEW [METER COLLAR ADAPTOR PROHIBITED INSTALLATIONS](#)



The screenshot shows a web form titled "Meter Collar Adapter". It contains two dropdown menus. The first dropdown is labeled "Is there a meter collar adapter?" and has "Yes" selected. The second dropdown is labeled "Meter Collar Equipment" and has "--None--" selected. Below the dropdowns is a scrollable list of meter collar equipment options, including "ConnectDER Simple Meter Collar" with various model numbers such as G-B-4-10-15, G-B-4-10-20, G-B-4-10-25, G-B-4-10-30, G-B-4-10-35, G-B-4-10-40, G-B-4-10-50, G-B-4-10-60, G-B-5-10-15, G-B-5-10-20, G-B-5-10-25, G-B-5-10-30, G-B-5-10-35, G-B-5-10-40, G-B-5-10-50, and G-B-5-10-60.

STEP 1: INITIATE APPLICATION

System Details – Array and Inverter



Inverter Details

Manufacturer	Model Number	Power Rating (kW)	Number of Inverters	
				New

New Inverter Details

Hardware

Search Hardware...

Number of Inverters

Save

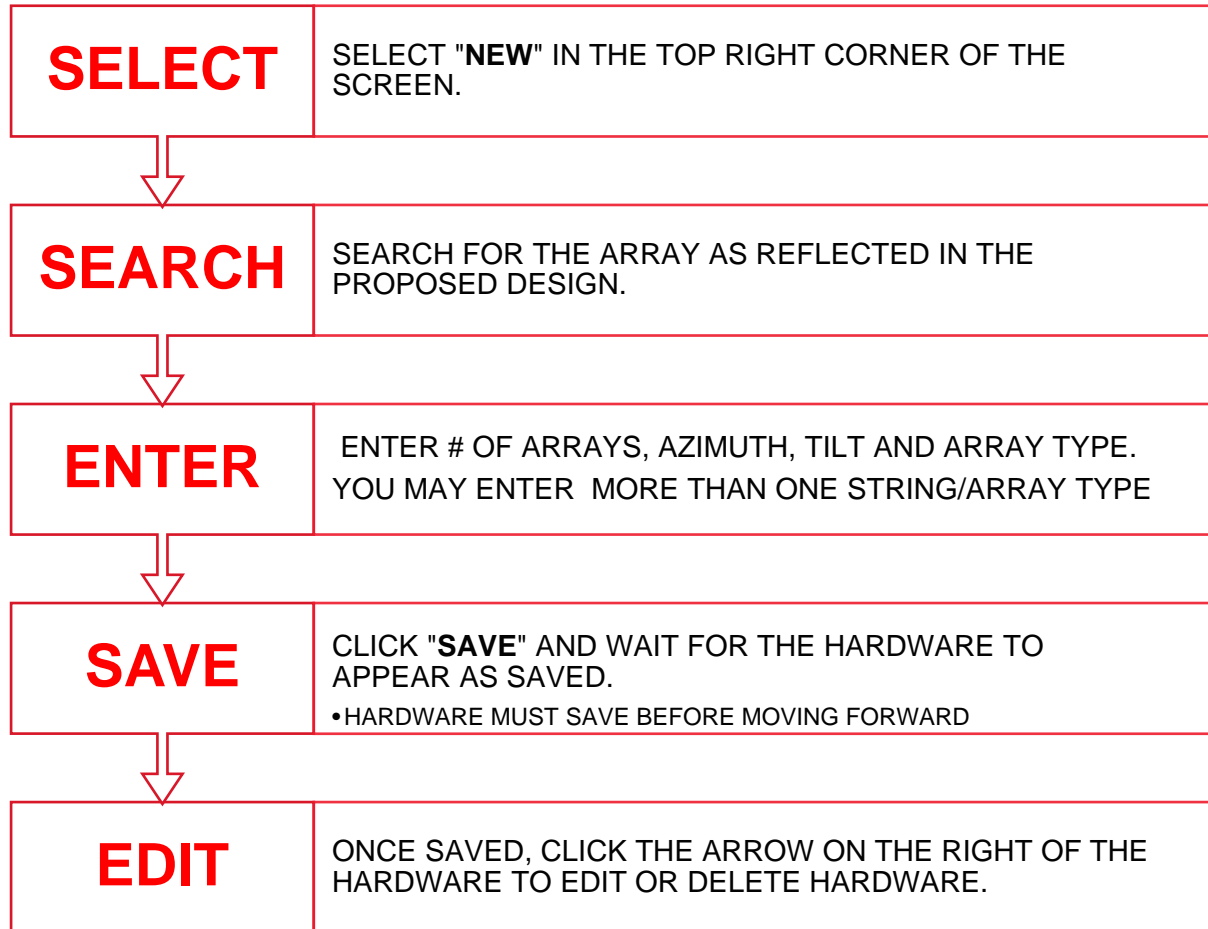
Back Next

Manufacturer	Model Number	Power Rating (kW)	Number of Inverters	
SolarEdge Technologies Ltd.	SE5000H-US [240V]	5.054	1.000	New Edit Delete

Back Next

STEP 1: INITIATE APPLICATION

System Details – Array and Inverter



New Array Details

Hardware

Number of Arrays

Azimuth (deg) ⓘ

Tilt (deg) ⓘ

Array Type ⓘ

--None--

Save

Array Details

Manufacturer	Model Number	Capacity (kW)	Number of Arrays	
REC Solar	REC365AA	7.300	20.000	New
REC Solar	REC365AA	3.650	10.000	

Back Next

STEP 1: INITIATE APPLICATION

System Details - Summary

- THE SUMMARY SCREEN WILL REFLECT THE HARDWARE ENTERED/SAVED.
- REVIEW THIS SCREEN CAREFULLY
- CLICK "NEXT" IF THIS INFORMATION IS CORRECT.
- YOU MAY EDIT YOUR HARDWARE BY CLICKING "BACK" IF CHANGES NEED TO BE MADE.
- THE "SYSTEM PV WATTS (KWH)" FIELD WILL BE USED TO EVALUATE THE 200% RULE.

Summary

Number Of Panels
12.00

Number of Inverters
1

DC Nameplate Rating (kW)
4.39

AC Active Power Nameplate Rating (kW)
5.054

System PV Watts (kWh)
6,796.388

STEP 1: INITIATE APPLICATION

System Details - 200% Rule Validation

200% Rule Validation

Result: 200% Rule Pass

Back

Next

200% RULE PASS: NO ADDITIONAL INFORMATION IS NEEDED. PLEASE PROCEED TO THE NEXT STAGE.

200% Rule Validation

Result: 200% Rule Fail - System Size Exceeds 200%. Please adjust the system size in the application to abide by the 200% rule. Have a question? Submit a Chatter comment to notify the program.

Back

Next

200% RULE FAIL – SYSTEM SIZE EXCEEDS 200%: THIS NOTICE INDICATES THE PROPOSED SYSTEM IS OVERSIZED BASED ON THE CUSTOMER'S LAST 12 MONTHS OF USAGE HISTORY. YOU WILL LIKELY NEED TO DOWNSIZE THE PROPOSED SYSTEM TO ABIDE BY THE 200% RULE. A TEAM MEMBER WILL EVALUATE THE PROPOSED SYSTEM AND ADVISE ON NEXT STEPS.

200% Rule Validation

Result: 200% Rule Fail - Additional Documentation Needed. For systems with a System Capacity greater than 12,455 kWh, please upload a site energy model or load analysis (i.e. Energy Audit Report or HERS report) with a PE stamp within the 200% Documentation action. Then, post a Chatter comment to notify the program. An Xcel Energy team member will then review and help you through the 200% rule check.

Back

Next

200% RULE FAIL – ADDITIONAL DOCUMENTATION NEEDED: THIS NOTICE INDICATES THE SYSTEM WAS MARKED AS NEW CONSTRUCTION OR THE CUSTOMER HAS LESS THAN 4 FULL MONTHS OF USAGE HISTORY AT THIS SITE. PLEASE UPLOAD PROOF OF SQUARE FOOTAGE FROM THE COUNTY ASSESSOR'S OFFICE, A HERS REPORT OR A COMMERCIAL ENERGY LOAD ANALYSIS.

- ENERGY MODELS/LOAD ANALYSIS MUST INCLUDED THE ANNUAL ESTIMATED USAGE IN KWH AND BE STAMPED BY A PROFESSIONAL ENGINEER (PE STAMP).

STEP 1: INITIATE APPLICATION

200% Rule – Tips

01

THE APPLICATION AGENT IS RESPONSIBLE FOR PROVIDING SUFFICIENT DOCUMENTATION IN ACCORDANCE WITH THE RULES SET FORTH.

02

THE "SYSTEM DETAILS" ACTION WILL REMAIN IN THE "OPEN" STATUS UNTIL THE 200% RULE **HAS BEEN BYPASSED** BY AN XCEL ENERGY TEAM MEMBER.

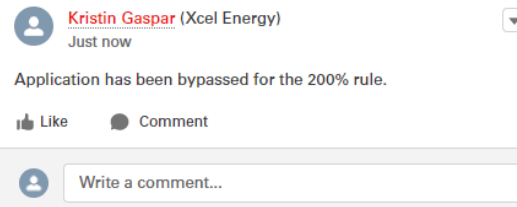
03

ONCE THE 200% RULE HAS BYPASSED, THE SYSTEM DETAILS ACTION WILL **MANUALLY BE MOVE TO "DRAFT"** STATUS BY XCEL.

- A **CHATTER COMMENT** WILL BE SENT TO INDICATE WHEN THE 200% RULE HAS BEEN BYPASSED.

04

COMPLETE THE "SYSTEM DETAILS" ACTION AND REFRESH THE PAGE TO UPDATE THE STATUS TO "DRAFT". NEXT COMPLETE "APPLICATION DETAILS" ACTION.



A screenshot of a notification interface. At the top, there is a profile picture of a person, followed by the name "Kristin Gaspar (Xcel Energy)" and the text "Just now". Below this is the message "Application has been bypassed for the 200% rule." Underneath the message are two icons: a thumbs-up icon labeled "Like" and a speech bubble icon labeled "Comment". At the bottom, there is a text input field with a placeholder "Write a comment..." and a small profile picture icon to its left.

STEP 1: INITIATE APPLICATION


Tenant/Landlord Release Form

- A TENANT/LANDLORD RELEASE FORM IS REQUIRED WHEN A SYSTEM INTERCONNECTING TO THE GRID IS OWNED BY A LANDLORD AND RENTED OUT TO A TENANT.
- PLEASE ENSURE THE LANDLORD CONTACT INFORMATION IS COMPLETED IN THE "CONTACT INFORMATION" ACTION.
- THE LANDLORD AND THE TENANT MUST SIGN THE TENANT/LANDLORD RELEASE FORM.
- IF THE LANDLORD PAYS THE ELECTRIC BILL, THE CUSTOMER CONTACT INFORMATION SHOULD BE THE LANDLORD'S CONTACT INFORMATION AS REFLECTED ON THE UTILITY BILL.
- IF THE LANDLORD WILL OWN THE PV SYSTEM, THE LANDLORD MUST BE SELECTED AS THE THIRD-PARTY OWNER.
- THIS WILL HAVE AN AFFECT ON WHO SIGNS THE INTERCONNECTION AGREEMENTS.

Application

Colorado

Clear form



Tenant and Landlord Release Form

Address: _____

Unit: _____

Tenant Name: _____

Landlord Name: _____

Tenant is aware that Landlord is installing a solar array on the above address where Tenant is currently living and may be responsible for the electric service. Tenant is also aware that this solar installation will be connected to the Xcel Energy electric meter for the specific address listed above. By signing this document, Tenant gives permission to Xcel Energy to exchange the electric meter for a net meter (one that will measure both what is used and what energy goes back to the grid from the solar system). By signing this document, Tenant also allows Xcel Energy to apply the PV tariff to Tenant's account, which carries no additional charges, but allows for the solar system to operate in conjunction with the Xcel Energy electric utility service and allows for the solar credit to be accounted for accurately.

Tenant and Landlord authorize Xcel Energy to receive this document pursuant to Colorado Public Utilities Commission Rule 1104. Code of Colorado Regulations (CCR) 723-1-1104.

Tenant Signature: _____ Date _____

Landlord Signature: _____ Date _____

STEP 1: INITIATE APPLICATION

Application Details

Application Details

Please complete supplemental fields to complete your application.

Open

Applicant



Action

Simplified Application

* Apparent Power AC Nameplate Rating (kVAac)

Enter a positive number with up to three decimal places. Click back into this field to make your updates.

* DER Limited Active Power Capacity (kWac)

* Nameplate rating: (AC Volts)

* Is export controlled to less than the Total Aggregate Nameplate Rating?

* Method of Export Limitation

--None--

* Power Control System Limited DER Capacity

* Power Control System export capacity (kW AC)

* Power Control System export capacity (kVA)

* Energy Storage System Power Control System Operating Mode

--None--

* Is the equipment UL1741 Listed?

* Proposed In-Service Date

Mar 10, 2022

* Energy Storage System Included?

APPLICATION DETAILS - FIELDS TO COMPLETE:

- APPARENT POWER AC NAMEPLATE RATING (KVAC)
- DER LIMITED ACTIVE POWER CAPACITY (KWAC)
- NAMEPLATE RATING (AC VOLTS)
- IS EXPORT CONTROLLED TO LESS THAN THE TOTAL AGGREGATE NAMEPLATE RATING? (Y/N)
- METHOD OF EXPORT LIMITATION
- POWER CONTROL SYSTEM LIMITED DER CAPACITY (Y/N)
- POWER CONTROL SYSTEM EXPORT CAPACITY (KW AC)
- ENERGY STORAGE SYSTEM POWER CONTROL SYSTEM OPERATING MODE
- IS THE EQUIPMENT UL 1741 CERTIFIED? (Y/N)
- PROPOSED INSERVICE DATE
- ENERGY STORAGE SYSTEM INCLUDED? (Y/N)
- POWER FACTOR (LEADING, LAGGING, UNITY)

STEP 1: INITIATE APPLICATION

Application Details

Application Details	Please complete supplemental fields to complete your application.	Draft	Applicant	<input checked="" type="checkbox"/>	Action
---------------------	---	-------	-----------	-------------------------------------	--------

Simplified Application

Clicking 'Submit' will save the web form data to your application and update the status of the Interconnection Application Action to "Draft."

If you would like to review the web form data, click the 'Back' button to review the previous screens.

Back

Submit

Simplified Application

Thank you for your submission. The data has been saved to your application.

Please complete the rest of your actions and finalize the application.

- ONCE YOU REACH THIS SCREEN, APPLICATION DETAIL FIELDS HAVE BEEN COMPLETED.
- **CLICK SUBMIT** ONCE YOU COMPLETE ALL NECESSARY FIELDS TO ENSURE YOUR DATA IS SAVED.
- RETURN TO YOUR HOME SCREEN AND **REFRESH** THE PAGE FOR THE ACTION TO MOVE TO "DRAFT" STATUS.
- UTILIZE THE "i" TO ACCESS HELP TEXT.

STEP 1: INITIATE APPLICATION

Battery Details and Declaration

Section 3853(c). of the Colorado Rules Regulating Electric Utilities (4 CCR 723-3)

VIEW THE ENERGY STORAGE GUIDE [HERE](#)

* Energy Storage Included?

Yes No

Battery Details	Please complete supplemental application fields regarding your energy storage system.	Open	Applicant	<input checked="" type="checkbox"/>	Action
Declaration	Please provide completed and signed Declaration Form	Open	Applicant	<input checked="" type="checkbox"/>	Action

STEP 1: INITIATE APPLICATION

Esignatures and Payments

Case #: 04468890

Status: Initiate Application

Step: Esignatures and Payments

Sub-Step:

App owner: Please submit payment and sign all required eSignature documents (sent via email) to advance your application to the next step. Some document(s) have been sent directly to the interconnection customer.

Save & Continue

- PAYMENTS WILL BE COMPLETED THROUGH THE ONLINE WELLS FARGO PORTAL (PREFERRED) OR VIA A CHECK SENT VIA MAIL.
- **ENGINEERING PROCESS FEES:** NON-REFUNDABLE UNLESS THE APPLICATION WAS NOT REVIEWED BY AN ENGINEER.
- **APPLICATION DEPOSIT FEES:** REFUNDABLE IF AN APPLICATION IS COMPLETED WITHIN THE SPECIFIED PROGRAM TIMEFRAME.
 - **SOLAR*REWARDS SMALL PROGRAM:** 12 MONTHS (365 CALENDAR DAYS) FROM PAYMENT.
 - **SOLAR*REWARDS MEDIUM PROGRAM:** 18 MONTHS (547 CALENDAR DAYS) FROM PAYMENT.
 - NOTE: ENGINEERING STUDY FEES WILL BE ASSESSED BASED OFF THE AGGREGATE TOTAL AC SYSTEM SIZE IF IT IS AN EXISTING AND EXPANSION ON THE SYSTEM.

	FEE SCHEDULE	COST
ENGINEERING PROCESS FEE	PV systems <= 10 kW AC	\$100
	PV systems > 10 - 250 kW AC	\$1,000
	PV systems > 250 kW - 2 MW AC	\$2,000
APPLICATION DEPOSIT FEE	Solar*Rewards Small Program (PV Systems <= 25kW DC)	\$250
	Solar*Rewards Medium Program (PV Systems 25.01 kW DC – 500kW DC)	\$1,500

STEP 1: INITIATE APPLICATION

Wells Fargo Payments

LOGIN MAKE PAYMENT

Registered Users One-Time Payments

Login ID

Password

[Forgot your Login ID?](#) [Password Help?](#) Login

- **WELLS FARGO PAYMENT STEPS (ONE-TIME PAYMENT):**
 - OPEN "MAKE PAYMENT" TAB
 - USE PRIMARY AND SECONDARY AUTHORIZATION CODES
 - AUTHORIZATION CODES LOCATED WITHIN FEE ACTION
- **WELLS FARGO PAYMENT STEPS (REGISTERED):**
 - USE YOUR LOGIN CREDENTIALS TO LOGIN INTO YOUR ACCOUNT
 - YOUR WELLS FARGO CREDENTIALS WILL DIFFER FROM YOUR DER PORTAL CREDENTIALS
 - YOUR INVOICE WILL APPEAR IN THE TOP RIGHT CORNER

Please see directions below for online payment. If preferred, fee(s) can always be paid traditionally via check/wire and form.

- Fee invoice(s) will not be available on the Wells Fargo payment site until the following day from when applicant arrives at a particular status/step that requires payment (e.g. Initiate Application / Draft).
- Please be sure to wait 24 hours to submit payment.
- Payments will post to the applicable application ID the day after payment is made to Wells Fargo (another 24 hours).
- Please enter Primary Authorization Code **System Generated @ 2021-03-04 15:20:46Z** and Secondary Authorization Code **55344** 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.

Payment Details:

Item Description	Invoice Number	Amount Due	Due Date	Payment Status
Application Deposit Fee	04468659-PN-0006147	\$1,500.00	May 24, 2022	Not Paid

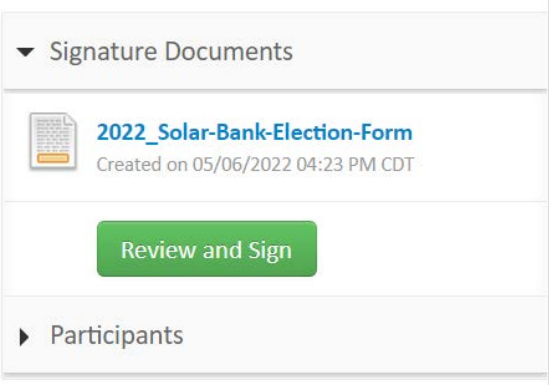
Please click the 'Pay Fee Online' button for online payment.

Pay Fee Online

STEP 1: INITIATE APPLICATION

Esignatures and Payments

- THE SOLAR BANK ELECTION FORM WILL AUTOMATICALLY BE SENT TO THE CUSTOMER FOR SIGNATURE TO THE EMAIL LISTED IN THE APPLICATION.
- THE CUSTOMER LISTED ON THE APPLICATION MUST SIGN THE FORM.
- THE SOLAR BANK ELECTION FORM ACTION WILL AUTOMATICALLY MOVE TO “DRAFT” STATUS ONCE THE SIGNATURE IS RECEIVED.



Case #: 04390374
 Status: Initiate Application
 Step: Esignatures and Payments
 Sub-Step:
 App owner: Please submit payment and sign all required eSignature documents (sent via email) to advance your application to the next step. Some document(s) have been sent directly to the interconnection customer.

[Save & Continue](#)

[Actions](#) [Finalized Actions](#) [Milestones](#) [Completed Milestones](#) [Application Details](#)

ACTION NAME	DESCRIPTION	STATUS	RESPONSIBLE PARTY	REQUIRED?	ACTION
Application Deposit Fee	Please pay the Application Deposit Fee through online payment to advance your application to the next step	Draft	Applicant	<input checked="" type="checkbox"/>	Action
Engineering Process Fee	Please pay the Engineering Process Fee through online payment to advance your application to the next step.	Draft	Applicant	<input checked="" type="checkbox"/>	Action
Solar Bank Election Form	Please check your email and sign all required eSignature documents to advance your application to the next step.	Draft	Applicant	<input checked="" type="checkbox"/>	Action

STEP 1: INITIATE APPLICATION

Solar Bank Election for Excess Generation Credits



PLEASE FULLY UNDERSTAND ELECTION OPTIONS PRIOR TO ADVISING CUSTOMERS ON THEIR SELECTION.

	Rollover vs Waive/Refund	
	A. Continuous Rollover Credits	B. Waive Decision
Full Retail Value	Yes	No (AHIC)
Permanent Election	Yes	No*
Monthly Rollover	Yes (\$)	Yes (kWh)
Year End Payout	No	Yes

- **CONTINUOUS ROLLOVER CREDITS:** WHERE EXCESS PANEL PRODUCTION IS STORED AS A \$ CREDIT AND ROLLS OVER MONTH-TO-MONTH WITH NO YEAR-END PAYOUT. THIS IS A PERMANENT CHOICE.
- **WAIVE DECISION OR REFUND:** WHERE EXCESS PANEL PRODUCTION IS STORED AS AN ENERGY UNIT (KWH), ROLLS OVER MONTH-TO-MONTH AND EXCESS PRODUCTION (IF THERE IS BANKED KWH) IS MONETIZED AT THE AHIC AT YEAR END (2021 AHIC: 1.786c per kWh). CHECKS ARE SENT IN THE FIRST QUARTER OF THE FOLLOWING YEAR.
- PLEASE ADVISE CUSTOMERS THE ROLLOVER OPTION IS A **PERMANENT ELECTION**.
- CUSTOMERS MAY MAKE A **ONE-TIME CHOICE*** TO CHANGE FROM WAIVE DECISION TO ROLLOVER.
- CREDITS ARE NON-TRANSFERRABLE TO NEW XCEL ENERGY ACCOUNTS.

[VIEW SOLAR TIME OF USE FAQ & NET METERING AND BILLING INFO SHEET]

STEP 1: INITIATE APPLICATION

Prepare Documents

Status: Initiate Application
Step: Prepare Documents
Sub-Step:

App Owner: Your application is pending submission upon uploading the required engineering documents. You have 30 days to complete this step and can save your draft application at any time and return to it later. Please make sure to complete all application requirements prior to finalizing and submitting for review. For more information, visit: <https://mn.my.xcelenergy.com/s/renewable/developers/interconnection>.

[Submit](#)

Actions Finalized Actions Milestones Completed Milestones Application Details

ACTION NAME	DESCRIPTION	STATUS	RESPONSIBLE PARTY	REQUIRED?	ACTION
One-Line Diagram	Show the installation of the DER system and associated equipment required within your interconnection application.	Open	Applicant	<input checked="" type="checkbox"/>	Action
Site Plan	Show the location plan identifying location of equipment noted on the one-line.	Open	Applicant	<input checked="" type="checkbox"/>	Action

- ONE-LINE AND SITE PLAN DOCUMENTATIONS ARE REQUIRED UPLOADS.
- VISIT OUR [ON-SITE SOLAR DEVELOPER RESOURCES](#) PAGE TO ACCESS GUIDELINES AND SAMPLE DOCUMENTATION.

STEP 1: INITIATE APPLICATION

Prepare Documents

1

- CLICK THE "**UPLOAD FILES**" BUTTON

2

- CHOOSE THE APPROPRIATE FILE FROM YOUR FILE EXPLORER OR DRAG AND DROP THE APPROPRIATE FILE.
- PLEASE NAME YOUR FILES APPROPRIATELY

3

- WAIT FOR THE FILE TO APPEAR AS SUCCESSFULLY UPLOADED.

4

- CLICK "**SUBMIT**"

Upload One-Line Diagram

 Upload Files

Line Diagram_2021-10-29 03_11_50

3/10/2022, 06:39
PM MST

Submit

STEP 1: INITIATE APPLICATION

Submitting application for Program Review

Case #: 04390374

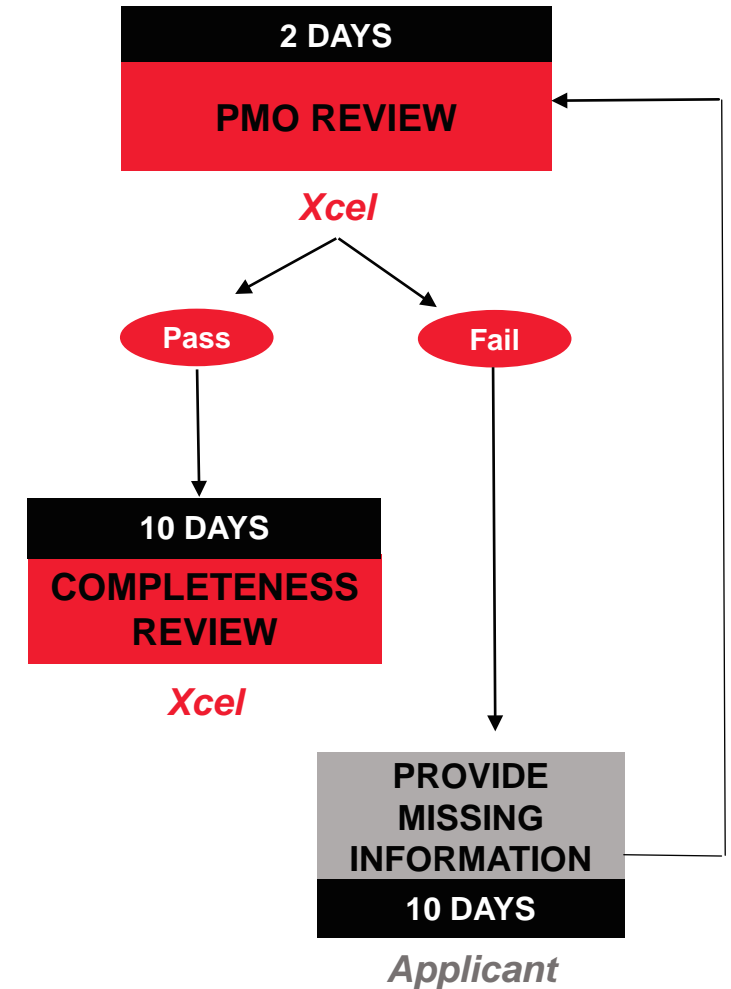
Status: Initiate Application

Step: In Review (PMO)

Sub-Step:

App Owner: Your application is being reviewed for completeness. If anything is missing, Xcel Energy will notify you within 10 business days. Xcel Energy: Perform Completeness Review.

- ONCE ALL ACTIONS ARE IN "DRAFT" STATUS **CLICK "SUBMIT"** TO PLACE YOUR APPLICATION INTO PROGRAM MANAGEMENT OFFICE (PMO) REVIEW QUEUE.
- ONCE IN THE XCEL ENERGY PROGRAM TEAM'S REVIEW QUEUE, THE STATUS, STEP, SUB-STEP WILL STATE **"INITIATE APPLICATION / IN REVIEW (PMO)"**.



REVIEW

PMO Approval Requirements

SITE PLAN:

- CUSTOMER LAST NAME MATCHES APPLICATION
- ADDRESS MATCHES APPLICATION

LINE DIAGRAM:

- CUSTOMER LAST NAME MATCHES APPLICATION
- ADDRESS MATCHES APPLICATION
- AC NAMEPLATE RATING (KW) AND DC SYSTEM CAPACITY (KW) SYSTEM SIZE MATCHES APPLICATION (CAN BE IN KW OR WATTS)
- NO PV PROD METER (SYSTEMS LESS THAN OR EQUAL TO 10 KWDC IN CO ONLY)

SGIA:

- AC ACTIVE POWER NAMEPLATE RATING (KW) FILED WITH SYSTEM SIZE OVER 25 KWAC ONLY
- MUST BE SIGNED
- ADDRESS MATCHES APPLICATION

SOLAR BANK ELECTION FORM:

- SIGNATURE MATCHES CUSTOMER NAME IN IA
- SECTION OF 'CONTINUOUS ROLLOVER' OR 'WAIVE' CASH OUT OPTION
- MAKE CUSTOMER SELECTION IN THE IA FIELD FOR "SOLAR BANK ELECTION"

APPLICATION INCLUDES A BATTERY?

- SIGNED DECLARATION REQUIRED FOR ALL BATTERY APPLICATIONS
- VERIFY ADDRESS AND BATTERY INFORMATION MATCHES APPLICATION

STEP 2: PROGRAM REVIEW

Provide Missing Information

Status: Initiate Application

Step: On Hold

Sub-Step: Provide Missing Information - PMO (Simple)

App Owner: Your application is missing required materials/details. Please address the Program Office comments and re-submit for review within 10 business days.

Submit

Actions Finalized Actions Milestones Completed Milestones Application Details

ACTION NAME	DESCRIPTION	STATUS	RESPONSIBLE PARTY	REQUIRED?	ACTION
One-Line Diagram	Show the installation of the DER system and associated equipment required within your interconnection application.	Open	Applicant	<input checked="" type="checkbox"/>	Action

- **INITIATE APPLICATION/ON HOLD/ PROVIDE MISSING INFORMATION:** INDICATES THE XCEL ENERGY TEAM HAS DISCOVERED A MISSING REQUIREMENT IN YOUR APPLICATION.
- AN XCEL ENERGY TEAM MEMBER WILL OPEN THE ACTION WHICH REQUIRES REMEDIATION.
 - A CHATTER COMMENT WILL BE LEFT TO PROVIDE ADDITIONAL DETAILS ON THE MISSING REQUIREMENTS.
- THE MISSING REQUIREMENT SHALL BE ADDRESSED WITHIN **10 BUSINESS DAYS**.

Create A New Post

* Topic

--None--

* Question

Include attachment?

Next

Sort by:

Most Recent Activity

Search this...



Lindsey Wilson (Xcel Energy)

2m ago

The customer name on the Line Diagram does not match the application.

Like

Comment



Write a comment...

STEP 3: COMPLETENESS REVIEW

Case #: 04390374

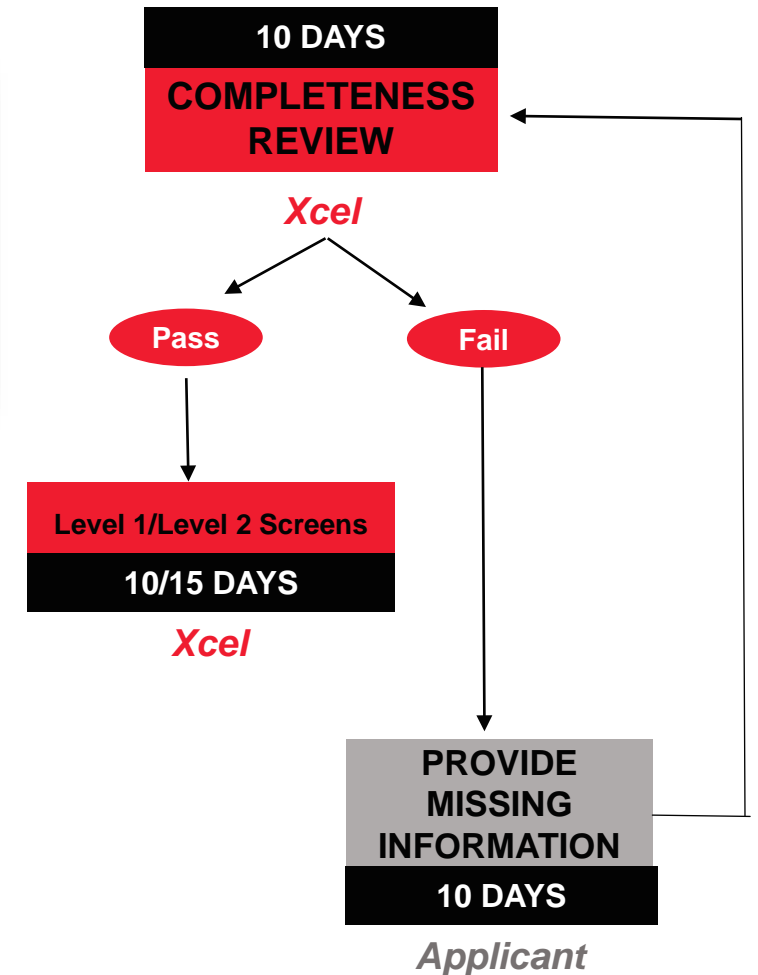
Status: Initiate Application

Step: Completeness Review (Eng)

Sub-Step: Submitted

App Owner: Your application is being reviewed for completeness. If anything is missing, Xcel Energy will notify you within 10 business days. Xcel Energy: Perform Completeness Review.

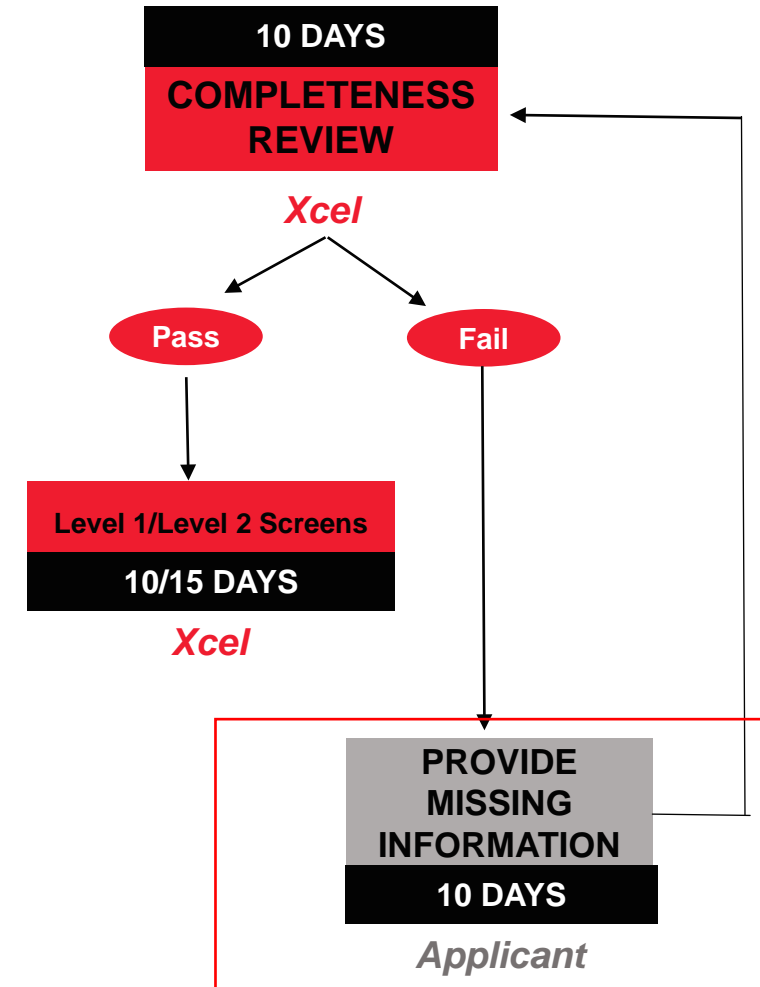
- ONCE THE APPLICATION HAS BEEN APPROVED BY PMO (PROGRAM MANAGEMENT OFFICE), THE APPLICATION ENTERS COMPLETENESS REVIEW.
- THE COMPLETENESS REVIEW TIMELINE AND SUBSEQUENT REVIEW TIMELINE IS MEASURED IN BUSINESS DAYS.
- PLEASE VIEW THE APPENDIX TO VIEW METERING REQUIREMENTS.
- **COMPLETENESS REVIEW GUIDELINES/RESOURCES:**
 - [INTERCONNECTION REQUIREMENTS DG MANUAL](#)
 - [STANDARD FOR ELECTRIC INSTALLATION AND USE](#)
 - [EXAMPLE LINE DIAGRAM](#)
 - [EXAMPLE SITE PLAN](#)



STEP 3: COMPLETENESS REVIEW

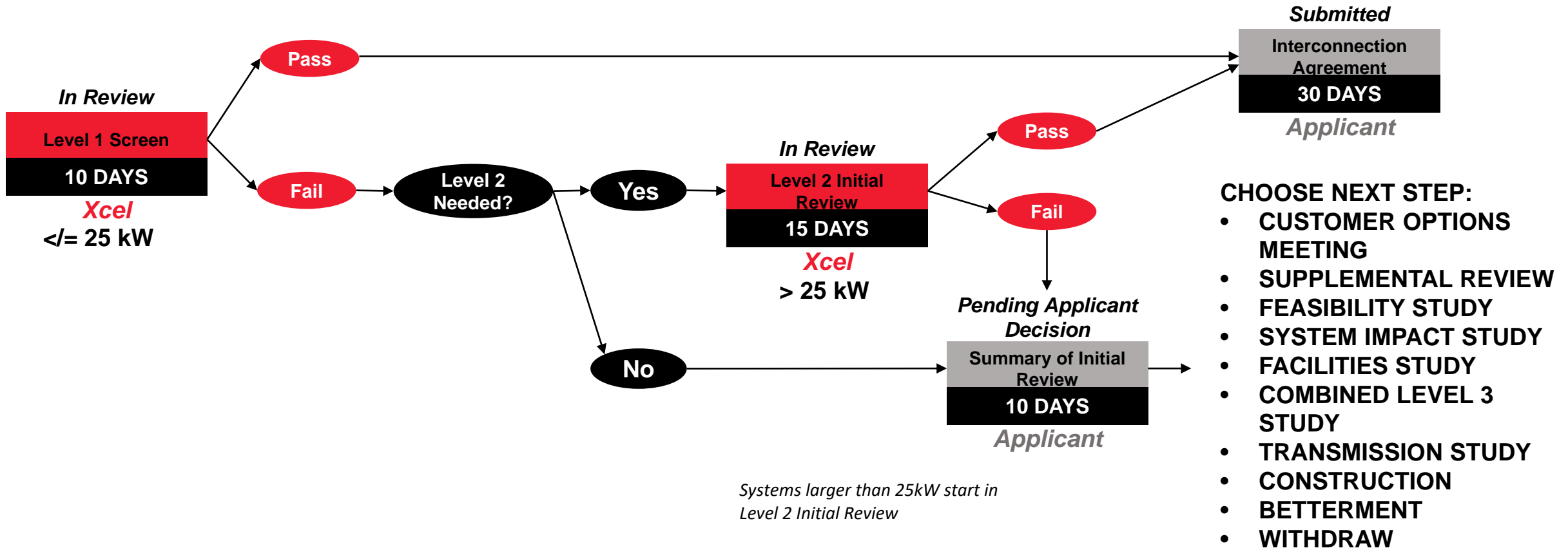
Provide Missing Information

- **INITIATE APPLICATION/ON HOLD/PROVIDE MISSING INFORMATION (ENG):** INDICATES THE XCEL ENERGY TEAM HAS DISCOVERED A MISSING REQUIREMENT IN YOUR APPLICATION.
- AN XCEL ENERGY TEAM MEMBER WILL OPEN THE ACTION WHICH REQUIRES REMEDIATION.
 - A REJECTION COMMENT WILL BE PROVIDED WITH DETAILED INFORMATION REGARDING THE APPLICATION REJECTION REASON
- THE MISSING REQUIREMENT(S) SHALL BE ADDRESSED WITHIN **10 BUSINESS DAYS**.



ENGINEERING SCREENS

Level 1 Screen, Level 2 Initial Review



STEP 4: ENGINEERING REVIEW

Level 1 Screen

WHAT IS A LEVEL 1 SCREEN?

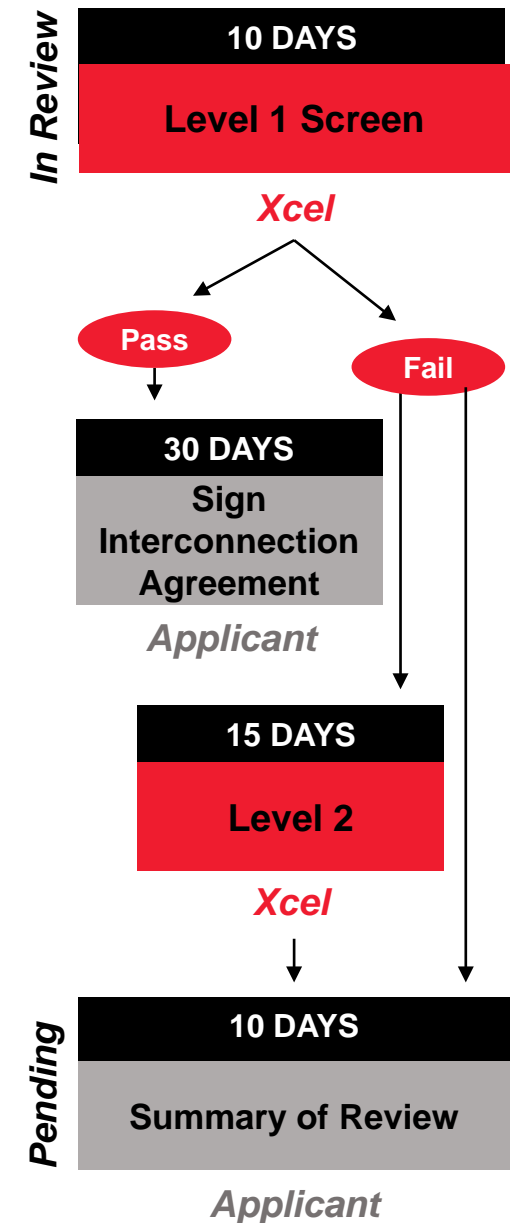
Section 3854 of the Colorado Rules Regulating Electric Utilities (4 CCR 723-3)

- FOR APPLICATIONS WITH A SYSTEM SIZE LESS THAN (OR EQUAL TO) 25 KW AC.

WHEN IS A LEVEL 2 INITIAL REVIEW NEEDED?

Section 3855 of the Colorado Rules Regulating Electric Utilities (4 CCR 723-3)

- WHEN THE APPLICATION IS LESS OR EQUAL TO 25 KW AC THAT FAILS LEVEL 1 AND NEEDS LEVEL 2 WILL GO THROUGH AN ELIGIBILITY CHECK.



STEP 4: ENGINEERING REVIEW

Level 2 Initial Review

WHAT IS A LEVEL 2 INITIAL REVIEW?

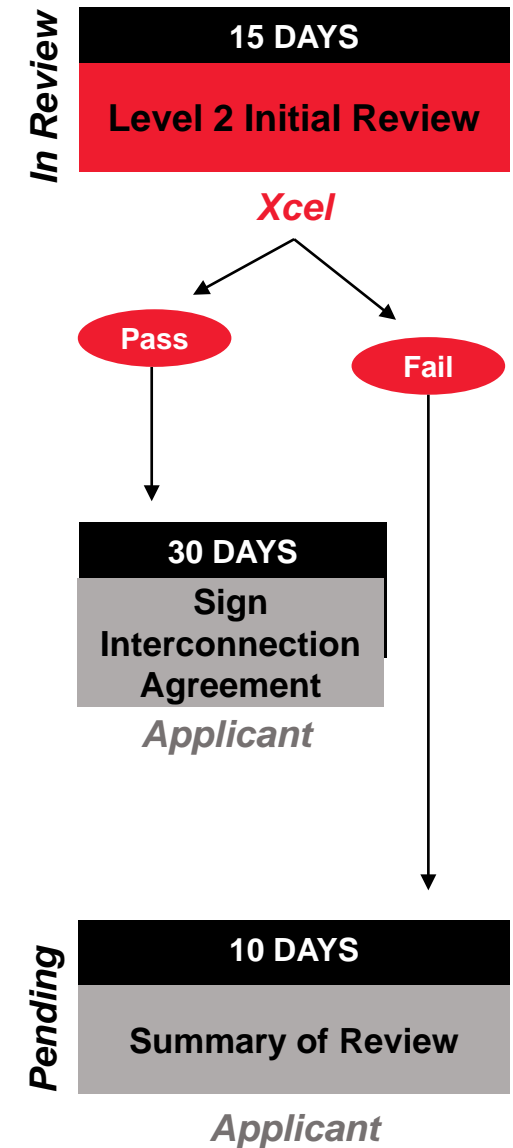
Section 3855(b) of the Colorado Rules Regulating Electric Utilities (4 CCR 723-3)

- FOR APPLICATIONS WITH A SYSTEM SIZE GREATER THAN 25 KW AC.

▼ Actions and Milestones

Case #: 04468474
Status: Engineering Screens
Step: In Review
Sub-Step: Level 2 Initial Review
App Owner: Xcel Energy to complete Level 2 (Fast Track) Initial Review within 15 business days.

Submit



STEP 4: ENGINEERING REVIEW

Supplemental Review

WHAT IS A SUPPLEMENTAL REVIEW?

Section 3855(d) of the Colorado Rules Regulating Electric Utilities (4 CCR 723-3)

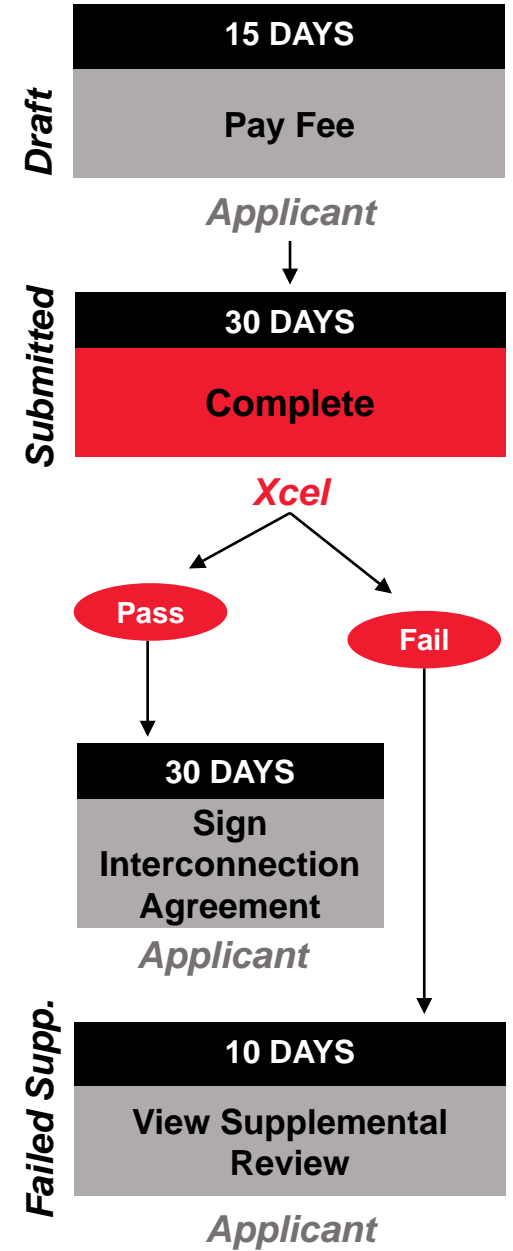
- IF APPLICATION FAILS LEVEL 2 INITIAL REVIEW, A SUPPLEMENTAL REVIEW MAY BE PERFORMED.
- SUPPLEMENTAL REVIEW FEE = \$200
- APPLICATION AGENT TO PROVIDE SUPPLEMENTAL REVIEW FEE WITHIN 15 BUSINESS DAYS.
- XCEL ENERGY HAS **30 BUSINESS DAYS** TO COMPLETE SUPPLEMENTAL REVIEW.

Case #: 04388509
 Status: Supplemental Review
 Step: Draft
 Sub-Step:
 App Owner: Please submit the Supplemental Review deposit within 15 business days.

[Submit](#)

[Actions](#) [Finalized Actions](#) [Milestones](#) [Completed Milestones](#) [Application Details](#)

ACTION NAME	DESCRIPTION	STATUS	RESPONSIBLE PARTY	REQUIRED?	ACTION
Supplemental Review Fee	Please pay the Supplemental Review Fee through online payment to advance your application to the next step.	Open	Applicant	<input checked="" type="checkbox"/>	Action



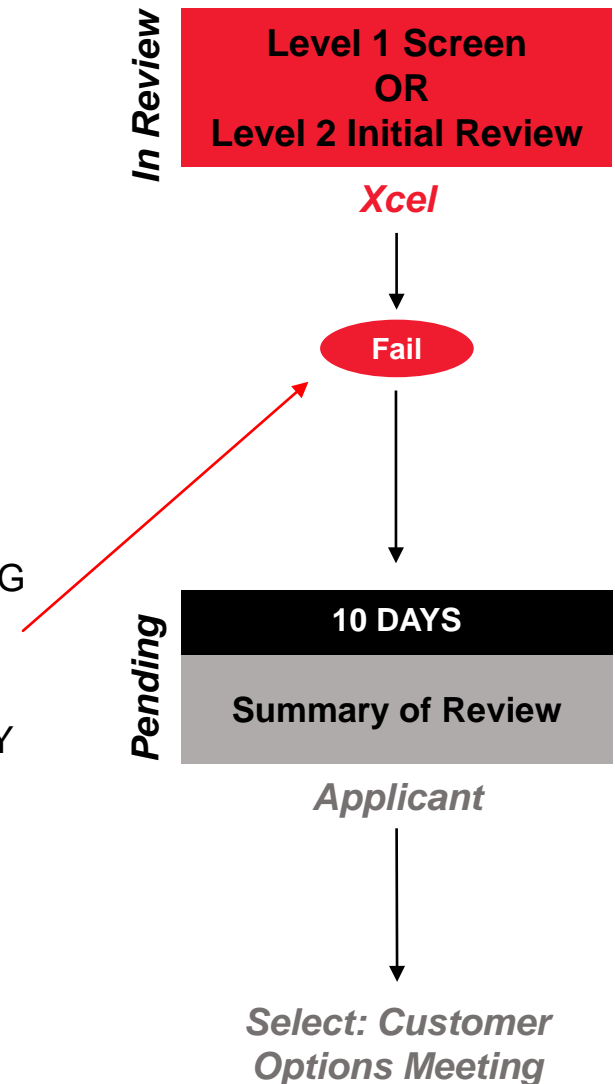
STEP 4: ENGINEERING REVIEW

Customer Options Meeting

WHAT IS A CUSTOMER OPTIONS MEETING?

Section 3855(c) of the Colorado Rules Regulating Electric Utilities (4 CCR 723-3)

- THE PURPOSE OF A **CUSTOMER OPTIONS MEETING** IS TO REVIEW POSSIBLE FACILITY MODIFICATIONS, SCREEN ANALYSES, AND RELATED RESULTS TO DETERMINE WHAT FURTHER STEPS ARE NEEDED TO PERMIT THE INTERCONNECTION RESOURCE TO BE CONNECTED SAFELY AND RELIABLY.
- **SCHEDULE OR FOREGO** A CUSTOMER OPTIONS MEETING. (A CUSTOMER OPTIONS MEETING CAN ONLY BE OMITTED IF THERE IS MUTUAL AGREEMENT BETWEEN BOTH PARTIES.)
- IF THE PROPOSED INTERCONNECTION FAILS THE SCREENS AND THE UTILITY CANNOT DETERMINE FROM THE INITIAL REVIEW WHETHER THE INTERCONNECTION RESOURCE MAY NEVERTHELESS BE INTERCONNECTED, XCEL ENERGY SHALL PROVIDE THE CUSTOMER WITH THE OPPORTUNITY TO ATTEND A CUSTOMER OPTIONS MEETING.
- **PLEASE REACH OUT TO THE PROGRAM, USING THE CHATTER FEATURE, TO SCHEDULE A CUSTOMER OPTIONS MEETING.**



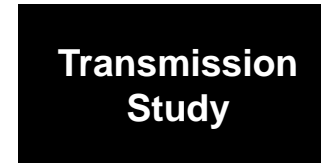
STEP 5: STUDY

Level 3 Study Process

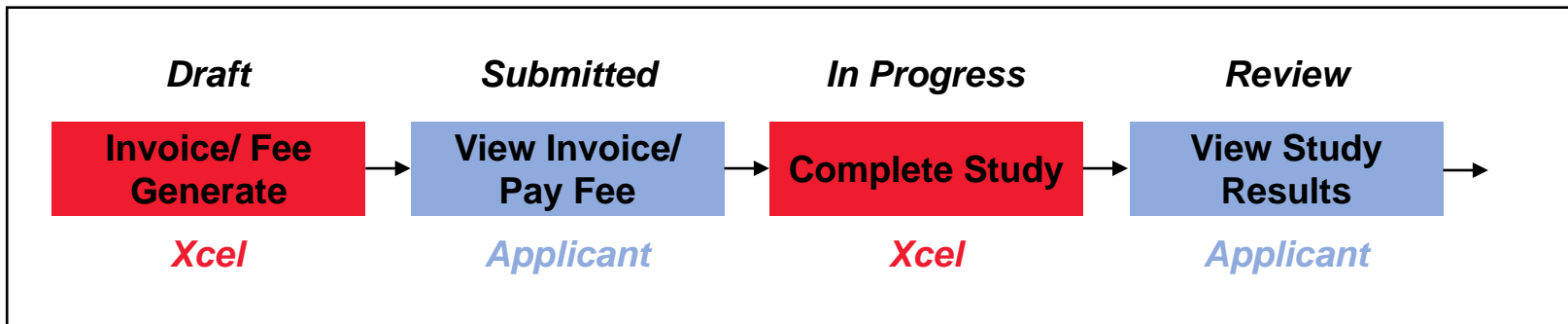


STUDIES

Level 3 Study Process



EACH OF THESE STUDIES HAVE A SIMILAR PROCESS WITHIN THE PORTAL.



If Transmission Study is required, Applicant is prompted to follow link, directed outside of DER Portal.

"Your application requires a Transmission Study. Please follow this [link](#) for more information and contact Xcel Energy Transmission Business Relations (TBR)."

STEP 5: STUDY

Scoping Meeting

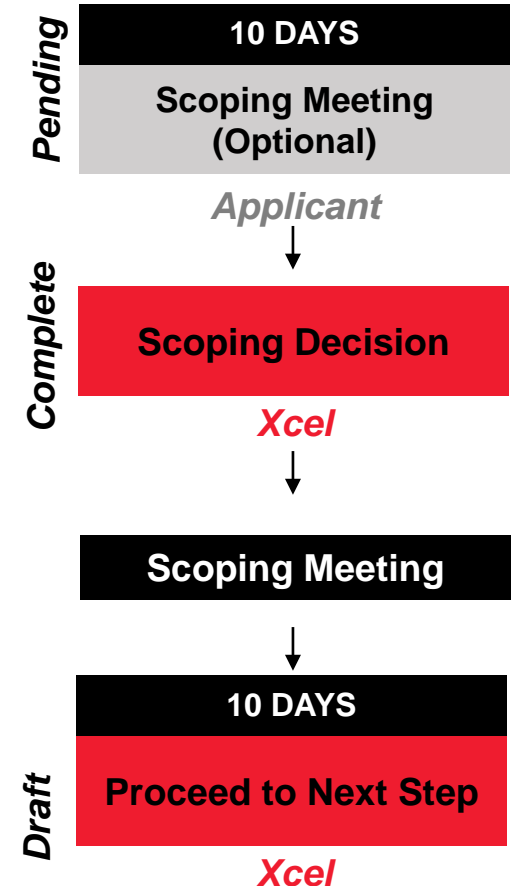
WHAT IS A SCOPING MEETING?

Section 3667(d) II. of the Colorado Rules Regulating Electric Utilities (4 CCR 723-3)

- THE PURPOSE OF THE SCOPING MEETING IS TO DISCUSS THE INTERCONNECTION REQUEST. THE PARTIES SHALL FURTHER DISCUSS WHETHER THE UTILITY SHOULD PERFORM A FEASIBILITY STUDY OR PROCEED DIRECTLY TO A SYSTEM IMPACT STUDY, OR A FACILITIES STUDY, OR AN INTERCONNECTION AGREEMENT.
- THE SCOPING MEETING **MAY BE OMITTED** BY MUTUAL AGREEMENT.
- **PLEASE REACH OUT TO THE PROGRAM, USING THE CHATTER FEATURE, TO SCHEDULE A SCOPING MEETING.**

ACTION NAME	DESCRIPTION	STATUS	RESPONSIBLE PARTY	REQUIRED?	ACTION
Scoping Meeting Decision	Would you like to proceed with a scoping meeting or go straight to the study agreement?	Open	Applicant	<input checked="" type="checkbox"/>	Action

Please see Milestones tab for deadline.



STEP 5: STUDY

Feasibility Study

WHAT IS A FEASIBILITY STUDY?

Section 3856(b). of the Colorado Rules Regulating Electric Utilities (4 CCR 723-3)

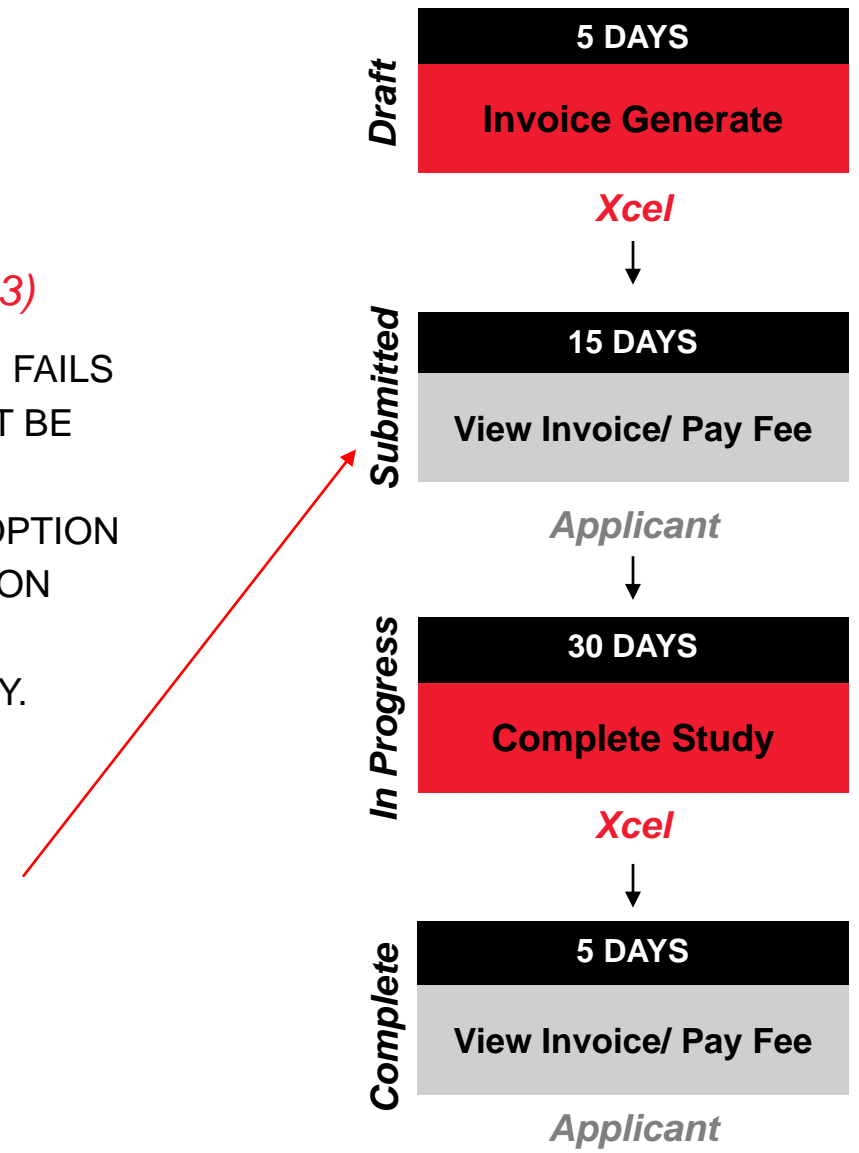
- A FEASIBILITY STUDY IS REQUIRED WHEN AN INTERCONNECTION RESOURCE FAILS SUPPLEMENTAL REVIEW AND ALTERNATIVE FEEDER ROUTING OPTIONS MUST BE CONSIDERED BEFORE PROCEEDING WITH A SYSTEM IMPACT STUDY.
- THE RESULTS OF THE FEASIBILITY STUDY WILL DETERMINE EXACTLY WHAT OPTION SHOULD BE STUDIED IN A SYSTEM IMPACT STUDY FOR THIS INTERCONNECTION RESOURCE.
- XCEL ENERGY HAS **30 BUSINESS DAYS** TO COMPLETE THE FEASIBILITY STUDY.

Case #: 04390416
 Status: Feasibility Study
 Step: Submitted
 Sub-Step:
 App Owner: Xcel Energy has indicated your application needs a Feasibility Study. View Invoice and pay the fee within 15 business days.

[Submit](#)

Actions Finalized Actions Milestones Completed Milestones Application Details

ACTION NAME	DESCRIPTION	STATUS	RESPONSIBLE PARTY	REQUIRED?	ACTION
Feasibility Study Fee	Pay Feasibility Study Fee through online payment to advance your application.	Open	Applicant	<input checked="" type="checkbox"/>	Action
Feasibility Study Invoice	View your Feasibility Study Invoice	Open	Applicant	<input checked="" type="checkbox"/>	Action



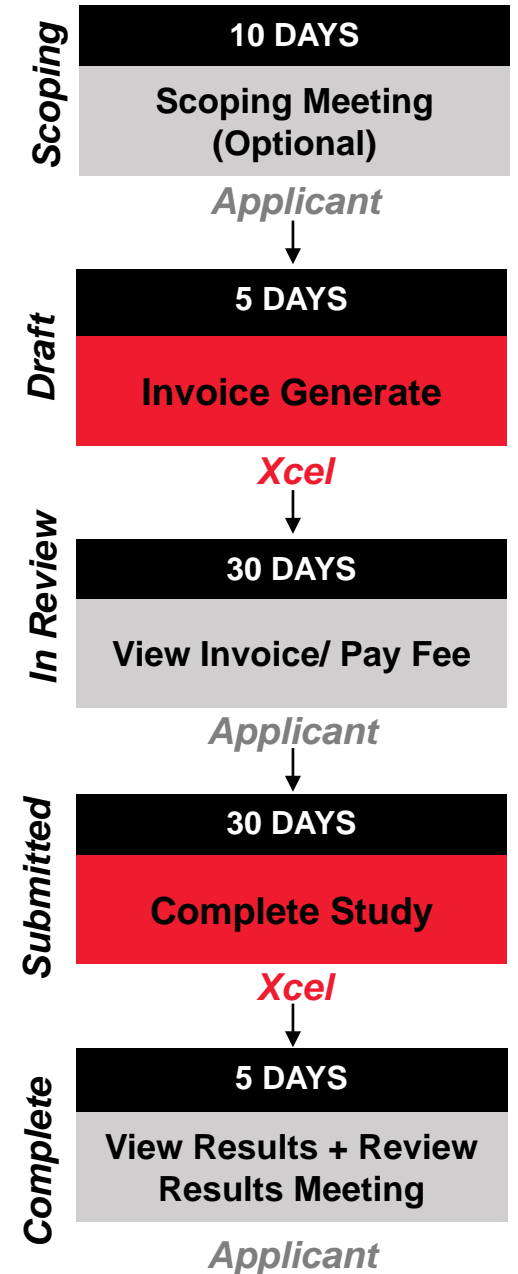
STEP 5: STUDY

System Impact Study

WHAT IS A SYSTEM IMPACT STUDY?

Section 3856(c) of the Colorado Rules Regulating Electric Utilities (4 CCR 723-3)

- A SYSTEM IMPACT STUDY WILL IDENTIFY AND DETAIL THE ELECTRIC DISTRIBUTION SYSTEM IMPACTS THAT WOULD RESULT IF THE PROPOSED INTERCONNECTION RESOURCE WERE INTERCONNECTED WITHOUT PROPER MODIFICATIONS OR ELECTRIC SYSTEM MODIFICATIONS.
- USES DETAILED ELECTRICAL SYSTEM MODELING SOFTWARE RATHER THAN A SERIES OF HIGHER-LEVEL PASS/FAIL SCREENS WITHIN THE SUPPLEMENTAL REVIEW.
- THE RESULTS WILL DETERMINE WHETHER THE PROPOSED INTERCONNECTION RESOURCE MAY BE CONNECTED SAFELY AND RELIABLY TO XCEL ENERGY'S SYSTEM AND WILL BE USED TO ASSEMBLE EITHER A GOOD FAITH COST ESTIMATE FOR CONSTRUCTION OR A MORE DETAILED FACILITIES STUDY FOR THE APPLICATION.
- FEE WILL BE DETERMINED BASED ON WHETHER IT IS A SINGLE STUDY, BATCH STUDY, OR CLUSTER STUDY.
- XCEL ENERGY HAS **30 BUSINESS DAYS** TO COMPLETE THE SYSTEM IMPACT STUDY.



STEP 5: STUDY

Facilities Study

WHAT IS A FACILITIES STUDY?

Section 3856(d) of the Colorado Rules Regulating Electric Utilities (4 CCR 723-3)

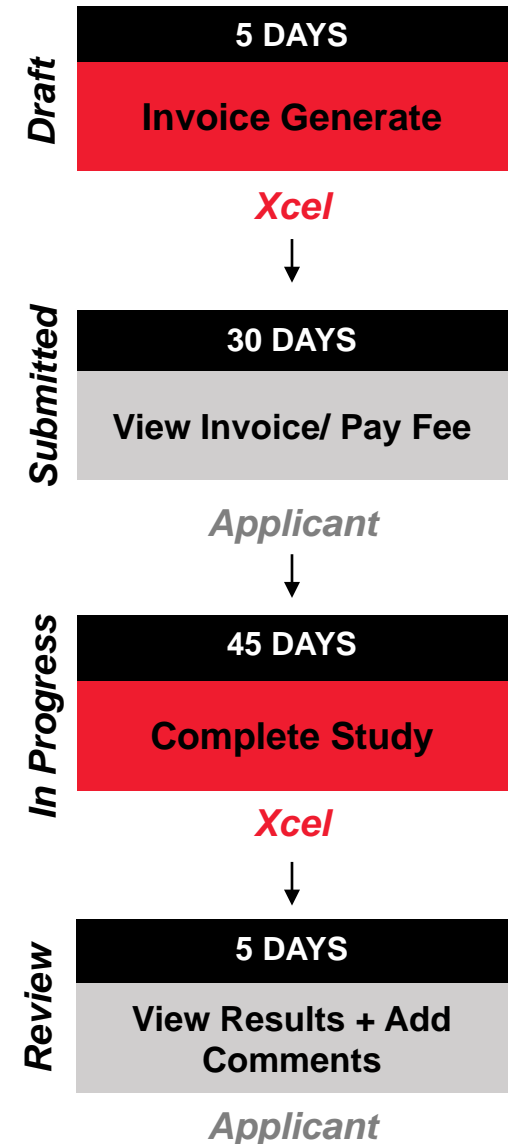
- THE FACILITIES STUDY SHALL INCLUDE A DETAILED LIST OF NECESSARY SYSTEM UPGRADES AND AN OVERALL COST ESTIMATE, WITH THE DETAILED LIST TO INDICATE TYPES OF EQUIPMENT, LABOR, OPERATION AND MAINTENANCE AND OTHER EVALUATED ITEM COSTS, WITHIN THE ESTIMATE FOR COMPLETING SUCH UPGRADES, AND IDENTIFY WHICH ITEMIZED COST ESTIMATES ARE UNCERTAIN AND COULD BE EXCEEDED BY 125 PERCENT IF ACTUAL UPGRADES ARE COMPLETED.
- XCEL ENERGY HAS **45 BUSINESS DAYS** TO COMPLETE THE FACILITIES STUDY.

Case #: 04390382
 Status: Facilities Study
 Step: Submitted
 Sub-Step:
 App Owner: Please view your Facilities Study Invoice and pay fee, within 30 business days.

[Submit](#)

[Actions](#) [Finalized Actions](#) [Milestones](#) [Completed Milestones](#) [Application Details](#)

ACTION NAME	DESCRIPTION	STATUS	RESPONSIBLE PARTY	REQUIRED?	ACTION
Facilities Study Fee	Please pay the Facilities Study Fee through online payment to advance your application to the next step.	Draft	Applicant	<input checked="" type="checkbox"/>	Action
Facilities Study Invoice	View your Facilities Study Invoice	Draft	Applicant	<input checked="" type="checkbox"/>	Action



STEP 5: STUDY

Combined Level 3 Study

WHAT IS A COMBINED LEVEL 3 STUDY?

Section 3856(a)(V) of the Colorado Rules Regulating Electric Utilities (4 CCR 723-3)

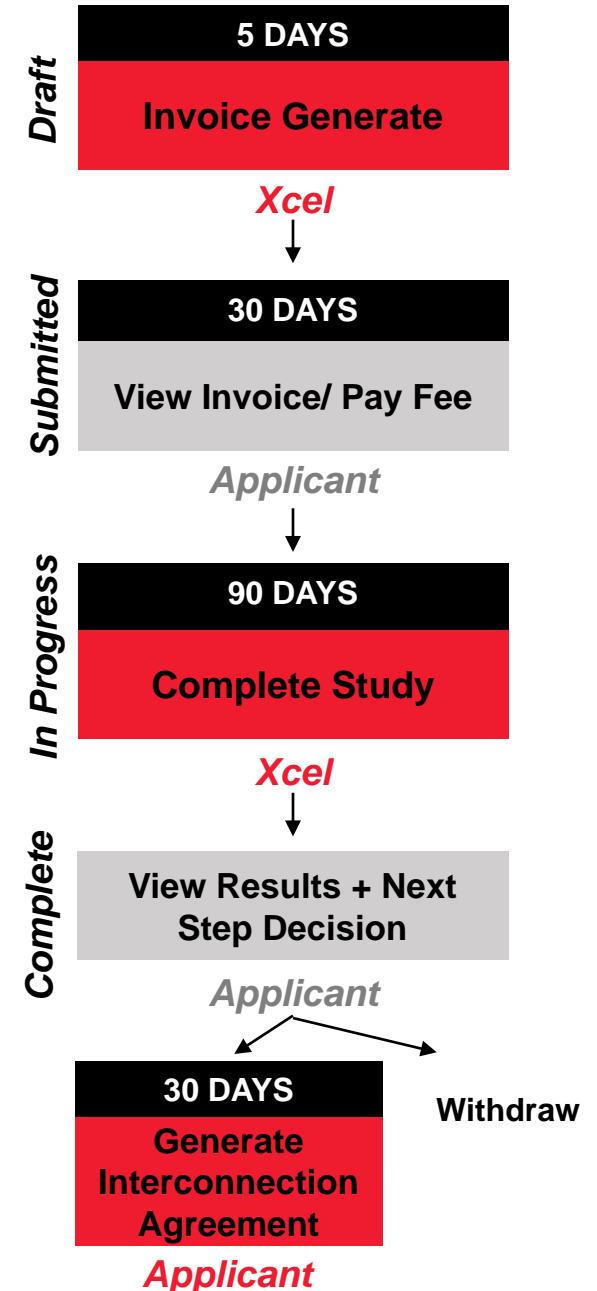
- IF FEASIBILITY STUDIES, SYSTEM IMPACT STUDIES, AND FACILITY STUDIES ARE COMBINED, OR REQUIRED TO BE COMPLETED FOR A SINGLE APPLICATION, XCEL ENERGY SHALL PERFORM THE COMBINED STUDIES WITHIN NO MORE THAN 90 BUSINESS DAYS OF THE DATE UPON WHICH THE INTERCONNECTION CUSTOMER AUTHORIZES XCEL ENERGY TO PROCEED WITH THE LEVEL 3 PROCESS.
- XCEL ENERGY HAS **90 BUSINESS DAYS** TO COMPLETE THE COMBINED LEVEL 3 STUDY.

Case #: 04390308
 Status: Combined Level 3 Study
 Step: Submitted
 Sub-Step:
 App Owner: View invoice and pay fee electronically to initiate the Combined Level 3 Study Process

[Submit](#)

[Actions](#) [Finalized Actions](#) [Milestones](#) [Completed Milestones](#) [Application Details](#)

ACTION NAME	DESCRIPTION	STATUS	RESPONSIBLE PARTY	REQUIRED?	ACTION
Combined Level 3 Fee	Please follow instructions to electronically pay Combined Level 3 Fee	Draft	Applicant	<input checked="" type="checkbox"/>	Action
Combined Level 3 View Invoice	View the Combined Level 3 Study Invoice for your application	Draft	Applicant	<input checked="" type="checkbox"/>	Action



STEP 5: STUDY

Transmission Study

WHAT IS A TRANSMISSION STUDY?

Section 3856(c) of the Colorado Rules Regulating Electric Utilities (4 CCR 723-3)

- THE PURPOSE OF THE STUDY IS TO IDENTIFY THE IMPACTS TO THE TRANSMISSION SYSTEM AND ANY AFFECTED SYSTEMS FROM A SOLAR PHOTOVOLTAIC FACILITY INTERCONNECTION ON THE CUSTOMER'S RETAIL LOAD.
- THE SCOPE OF THE STUDY INCLUDES THE FOLLOWING: POWER FLOW ANALYSIS TO EVALUATE THE IMPACTS TO THE TRANSMISSION SYSTEM AND AFFECTED SYSTEMS, AND ALSO IDENTIFY COSTS OF TRANSMISSION IMPROVEMENTS AND ANY MODIFICATIONS TO SUBSTATION FACILITIES AND METERING REQUIRED TO ACCOMMODATE THE BACKFEED ON TO THE TRANSMISSION SYSTEM.
- THE STUDY WILL BE BASED ON THE FOLLOWING ASSUMPTIONS: THE STUDY WILL EVALUATE THE RETAIL INTERCONNECTION FOR MAXIMUM BACKFEED AND MINIMUM LOAD CONDITION WHICH IS EXPECTED TO OCCUR WHEN THE LOAD IS OFFLINE AND WILL FOLLOW ALL APPLICABLE NERC RELIABILITY STANDARDS AND WECC RELIABILITY CRITERIA, AS WELL AS ANY INTERNAL PLANNING CRITERIA.

Draft

Planning Study

Applicant



Contact Xcel Energy
Transmission Business
Relations (TBR):
[Interconnections |
Transmission | Xcel Energy](#)



STEP 5: INTERCONNECTION AGREEMENT

DER IA & REC Purchase Contracts

STEP 6: INTERCONNECTION AGREEMENTS

Distributed Energy Resource Interconnection Agreement

Section 3853(f). of the Colorado Rules Regulating Electric Utilities (4 CCR 723-3)

Case #: 04468680

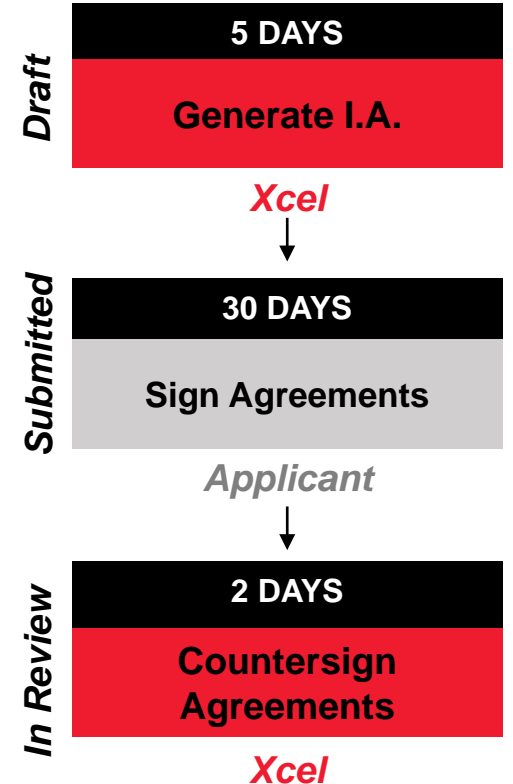
Status: Interconnection Agreement

Step: In Review

Sub-Step:

App Owner: Your application is pending counter-signature of the Interconnection Agreement and will be signed within 2 business days. Xcel Energy: Countersign the Interconnection Agreement.

"INTERCONNECTION AGREEMENT" MEANS A CONTRACT BETWEEN THE INTERCONNECTION CUSTOMER AND THE UTILITY THAT FORMALLY DOCUMENTS TERMS AND CONDITIONS RELATED TO THE OPERATION AND MAINTENANCE OF ANY DER IN ACCORDANCE WITH THE UTILITY'S TARIFFS ON FILE WITH THE COMMISSION.



STEP 6: INTERCONNECTION AGREEMENTS

Distributed Energy Resource Interconnection Agreement

WHEN WILL THE INTERCONNECTION AGREEMENT NEED TO BE MANUALLY GENERATED?

- IF AN APPLICATION GOES THROUGH THE STUDY PROCESS AND REQUIRES UPGRADES TO THE ELECTRIC SYSTEM, AN INTERCONNECTION AGREEMENT WILL BE MANUALLY POPULATED TO ADD INFORMATION INTO EXHIBIT B - COSTS AND EXHIBIT D – OPERATING REQUIREMENTS, AS APPLICABLE.

WHAT IS THE REC PURCHASE CONTRACT?

- THE REC PURCHASE CONTRACT IS THE AGREEMENT FOR PARTICIPATION IN THE SOLAR*REWARDS PROGRAM. THE CONTRACT DETAILS THE TERMS AND CONDITIONS OF PARTICIPATION AND THE PAYMENT FOR RENEWABLE ENERGY CERTIFICATES(RECS) BY XCEL ENERGY FOR A TERM OF 20-YEARS.

STEP 6: INTERCONNECTION AGREEMENTS

Interconnection Agreement / In Review

ONCE THE SYSTEM OWNER AND INSTALLER/DEVELOPER SIGN THE INTERCONNECTION AGREEMENT, THEN IT IS COUNTERSIGNED BY XCEL ENERGY WITHIN 2 BUSINESS DAYS. THE APPLICATION WILL THEN MOVE TO DESIGN & CONSTRUCTION.

Case #: 04468680

Status: Interconnection Agreement

Step: In Review

Sub-Step:

App Owner: Your application is pending counter-signature of the Interconnection Agreement and will be signed within 2 business days. Xcel Energy: Countersign the Interconnection Agreement.

Case #: 04468680

Status: Interconnection Agreement

Step: Complete

Sub-Step:

App Owner: Your Interconnection Agreement has been countersigned by Xcel Energy. Your application is now pending the start of design and construction.

STEP 7: DESIGN & CONSTRUCTION

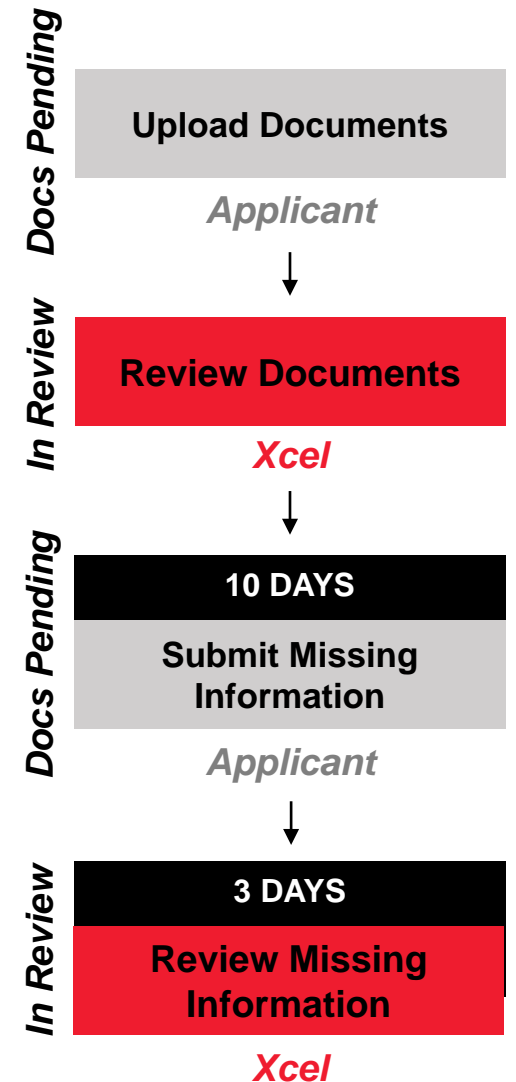
Documents Pending

- DURING THE DESIGN AND CONSTRUCTION STAGE, THE FOLLOWING DOCUMENTS ARE COLLECTED FROM THE APPLICANT:
 - INSTALLATION DETAILS
 - FINAL ELECTRICAL INSPECTION
 - NABCEP (SOLAR*REWARDS ONLY)
 - WITNESS TEST INFO SHEET (IF WITNESS TEST IS NEEDED [LINK TO WITNESS TEST SLIDE])
 - 911 DOCUMENTATION (S*RC ONLY)
 - AS-BUILT ONE LINE (S*RC ONLY)*
 - AS-BUILT SITE PLAN (S*RC ONLY)*
 - AS-BUILT SGIA (S*RC ONLY)*
 - INSURANCE POLICY (>1MW ONLY)

**SOLAR*REWARDS/DISTRIBUTED GENERATION APPLICATIONS: PLEASE UPLOAD DUMMY DOCUMENTS INTO THE "AS-BUILT" ACTION. DO NOT SUBMIT REVISED PLANS.*

Case #: 04390410
 Status: Design and Construction
 Step: Documents Pending
 Sub-Step:
 App Owner: Your application is pending submission of the following documents before testing and finalizing your interconnection application.

[Submit](#)



STEP 7: DESIGN & CONSTRUCTION

Documents Pending – Installation Details

- **FINAL INVOICE AMOUNT:** ENTER FINAL INVOICE AMOUNT AND INCLUDE COST OF BATTERY BACKUP, IF APPLICABLE.
- **INSPECTION DATE:** ENTER THE DATE THE SYSTEM WAS INSPECTED BY THE CITY/COUNTY HAVING JURISDICTION.
- **PV/DG INSTALLATION DATE:** PROVIDE THE DATE THE SYSTEM WAS FULLY INSTALLED. FOR PV SYSTEMS, PROVIDE DATE PRIOR TO INSPECTION.
- **RESTRICTED ACCESS TO METER AREA:** IS THERE ANYTHING THAT WOULD PREVENT XCEL ENERGY FROM INSTALLING THE METER AT THE EARLIEST POSSIBLE TIME? IF SO, PLEASE SELECT "YES" AND ENTER ANY NOTES IN THE APPLICATION NOTES FIELD ON THE NEXT SCREEN.
 - **DO NOT ANSWER YES UNLESS THE METER TRULY HAS RESTRICTED ACCESS. IF YOU ERRANTLY SELECT YES, THIS MAY CAUSE DELAYS TO THE INSTALLATION FOR OUR MUTUAL CUSTOMER.**

IF YOU CHECK "YES" YOU MUST PROVIDE A REASON FOR THE RESTRICTED ACCESS. **IF NO REASON IS PROVIDED, AN APPOINTMENT WILL NOT BE REQUESTED FOR THIS CUSTOMER.**

RESTRICTED ACCESS REASONS = PETS NOT LOCKED UP, LOCKED GATES, RESTRICTED AREA.

ONCE THE METERS HAVE BEEN ORDERED, AN ASSOCIATE FROM THE METERING DEPARTMENT WILL CONTACT THE CUSTOMER DIRECTLY TO SET UP AN APPOINTMENT.

* Final Invoice Amount ⓘ

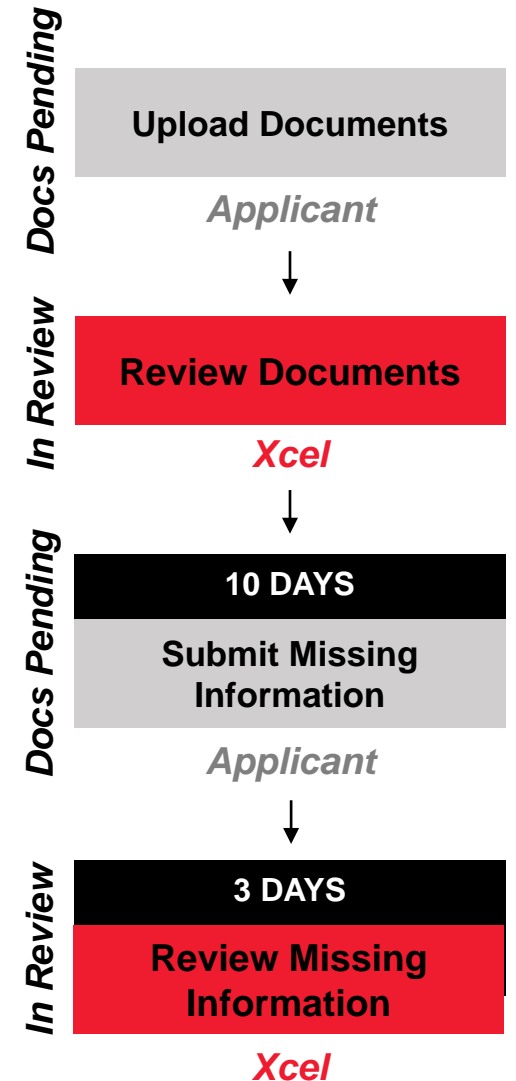
 Complete this field.

* Inspection Date ⓘ

* PV/DG Installation Date ⓘ

Waive Net Metering ⓘ

Restricted Access To Meter Area ⓘ



STEP 7: DESIGN AND CONSTRUCTION

Design and Construction / In Review

FINAL ELECTRICAL INSPECTION:

- ADDRESS MATCHES APPLICATION
- CITY/COUNTY HAVING JURISDICTION CLEARLY NOTED (SOURCE/CITY STAMP)
- INDICATES "PASSING" RESULT
- INSPECTED WITHIN ONE YEAR OF UPLOAD

NABCEP:

- CUSTOMER NAME, CASE NUMBER, AND SITE ADDRESS MATCHES APPLICATION
- CEP NAME AND CEP NUMBER MUST BE LISTED
- MUST BE SIGNED

INTERCONNECTION AGREEMENTS:

- SIGNATURE ON THE INTERCONNECTION AGREEMENTS MATCHES THE OWNER'S NAME ON THE APPLICATION

XCEL ENERGY REVIEW TIMEFRAME = 3 BUSINESS DAYS

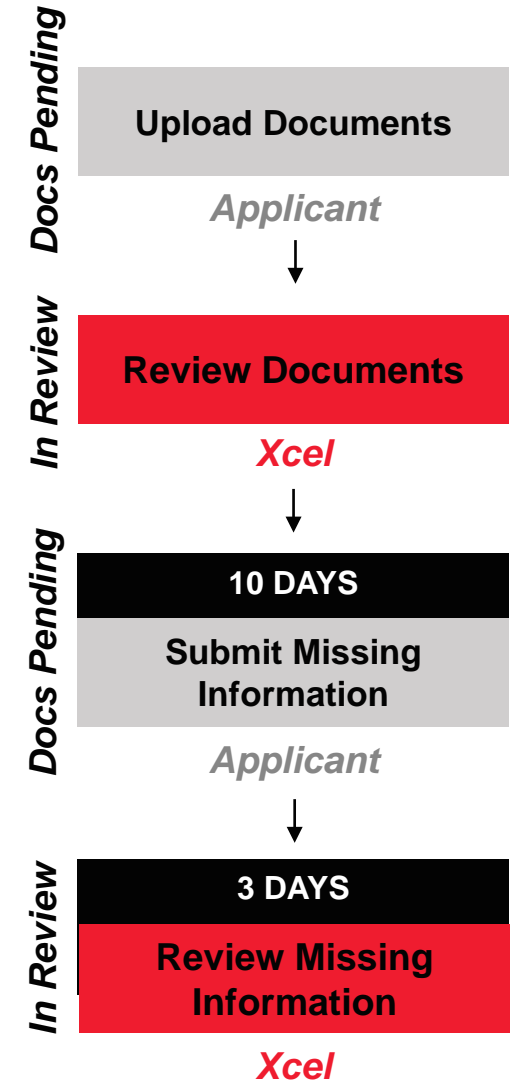
Case #: 04390410

Status: Design and Construction

Step: In Review

Sub-Step:

App Owner: Xcel Energy is reviewing the submitted documents and will notify you if any documents are missing or needs to be resubmitted.



STEP 7: DESIGN AND CONSTRUCTION

Design and Construction / Provide Missing Information

Status: Design and Construction
 Step: Documents Pending

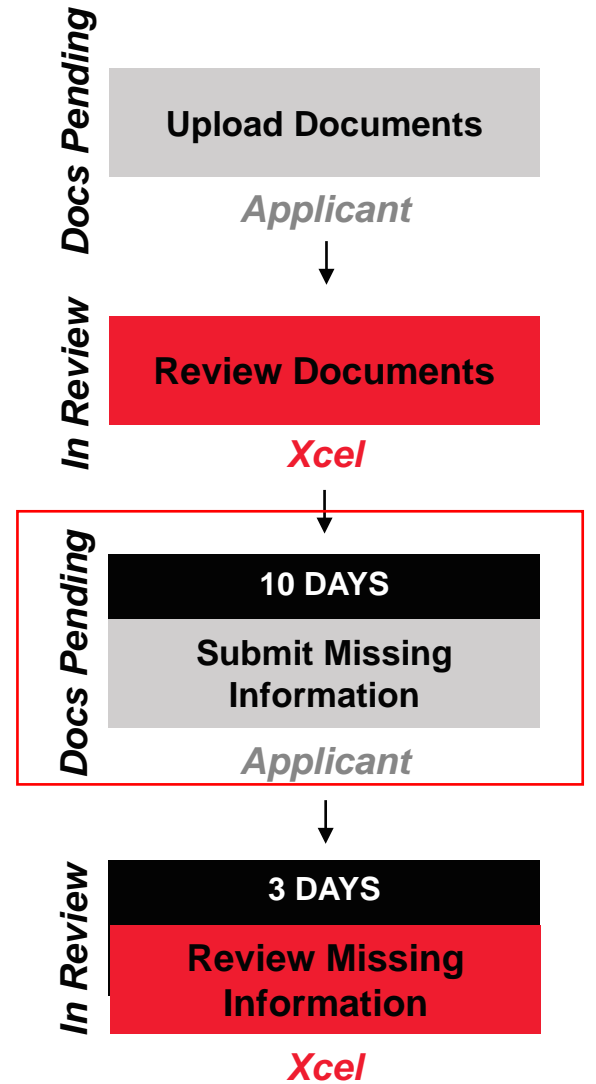
Sub-Step:
 App Owner: Your application is pending submission of the following documents before testing and finalizing your interconnection application.

[Submit](#)

[Actions](#) [Finalized Actions](#) [Milestones](#) [Completed Milestones](#) [Application Details](#)

ACTION NAME	DESCRIPTION	STATUS	RESPONSIBLE PARTY	REQUIRED?	ACTION
Final Electrical Inspection	Upload a signed Final Electrical Inspection form for your DER system	Open	Applicant	<input checked="" type="checkbox"/>	Action

- IF AN XCEL ENERGY TEAM MEMBER HAS INDICATED YOUR DOCUMENTS DO NOT MEET THE PROPER REQUIREMENTS, THE APPLICATION WILL MOVE TO "DESIGN AND CONSTRUCTION / DOCUMENTS PENDING".
 - A CHATTER COMMENT WILL BE LEFT DETAILING THE MISSING REQUIREMENT.
- THE APPLICATION AGENT IS RESPONSIBLE FOR PROVIDING COMPLETED DOCUMENTATION WITHIN 10 BUSINESS DAYS.
- IF THE CUSTOMER DID NOT SIGN THE DOCUMENTS CORRECTLY, THE APPLICATION WILL MOVE TO THE INTERCONNECTION AGREEMENT STAGE AND THE AGREEMENTS WILL AUTOMATICALLY BE RE-TRIGGERED.



STEP 7: DESIGN & CONSTRUCTION

NABCEP

- A [NABCEP](#) FORM IS REQUIRED IN ALL SOLAR*REWARDS APPLICATIONS BECAUSE THE INCENTIVES TIED TO THE PROGRAM ARE WHOLLY OR PARTIALLY FUNDED THROUGH RATEPAYER-FUNDS (I.E. THE RESA).

"THE PERFORMANCE OF ALL PHOTOVOLTAIC ELECTRICAL WORK, THE INSTALLATION OF PHOTOVOLTAIC MODULES, AND THE INSTALLATION OF PHOTOVOLTAIC MODULE MOUNTING EQUIPMENT IS SUBJECT TO ON-SITE SUPERVISION BY A CERTIFIED PHOTOVOLTAIC ENERGY PRACTITIONER, AS DESIGNATED BY THE NORTH AMERICAN BOARD OF CERTIFIED ENERGY PRACTITIONERS (NABCEP), OR A LICENSED MASTER ELECTRICIAN, LICENSED JOURNEYMAN ELECTRICIAN, OR LICENSED RESIDENTIAL WIREMAN, AS DEFINED IN [SECTION 12-23-101, C.R.S.](#)"

Solar*Rewards

Photovoltaic Installation Supervision Certification (NABCEP Form)

The undersigned, as Applicant for incentive payments under Xcel Energy's Colorado Solar*Rewards program, understands and agrees that, pursuant to C.R.S. § 40-2-128, payment by Xcel Energy of any incentives related to work on the PV installation identified below is conditioned upon Applicant's supplying the name and certification number of each certified energy practitioner (CEP) who actually provided on-site supervision of the PV installation (including photovoltaic electrical work, the installation of photovoltaic modules, and the installation of photovoltaic module mounting equipment) or was present to maintain the three-to-one ratio required by paragraphs (b), (c), and (d) of C.R.S. § 40-2-128(1).

Applicant hereby certifies that the name(s) and certification number(s) of the certified energy practitioner(s) who actually provided on-site supervision of the PV installation or who was/were present to maintain the required three-to-one ratio, as required by C.R.S. § 40-2-128(1), is/are as follows:

CEP Name: Certification Number:

STEP 7: DESIGN & CONSTRUCTION

Final Electrical Inspection

- PROOF OF A FINAL/PASSING ELECTRICAL INSPECTION FROM THE CITY OR COUNTY/LOCAL AHJ IS REQUIRED FOR ALL APPLICATIONS.
- THE FINAL ELECTRICAL INSPECTION DOCUMENT MUST INCLUDE:
 - THE PREMISE ADDRESS.
 - THE NAME/EMBLEM OF THE INSPECTION AGENCY (EX. CITY OF DENVER).
 - THE TYPE OF INSPECTION (FINAL/PV/SOLAR ELECTRICAL).
 - THE OUTCOME OF THE INSPECTION (INDICATION OF PASS/FAIL/RELEASE).
 - THE DATE OF THE INSPECTION.
 - THE INSPECTOR'S NAME AND/OR SIGNATURE (ELECTRONIC SIGNATURE OR INITIALS ARE ACCEPTED).
- IF THE CITY/COUNTY DOES NOT PROVIDE AN ELECTRICAL INSPECTION FORM THAT MEETS THESE REQUIREMENTS, THE [XCEL ENERGY FINAL ELECTRICAL INSPECTION FORM](#) CAN BE USED IN ITS PLACE.

ACTION NAME	DESCRIPTION	STATUS	RESPONSIBLE PARTY	REQUIRED?	ACTION
Final Electrical Inspection	Upload a signed Final Electrical Inspection form for your DER system	Open	Applicant	<input checked="" type="checkbox"/>	Action

STEP 8: METERING & TESTING

Metering

- DURING THE METERING & TESTING STEP, XCEL ENERGY PROGRAM TEAM WILL REQUEST THE REQUIRED SOLAR METERS.
- METER INSTALLATION CAN TAKE UP TO 20-BUSINESS DAYS.
- IF THE "RESTRICTED ACCESS" FIELD WAS SELECTED AS "YES" THEN A METERING DEPARTMENT REPRESENTATIVE WILL CALL THE CUSTOMER TO MAKE AN APPOINTMENT FOR THE FIELD VISIT.

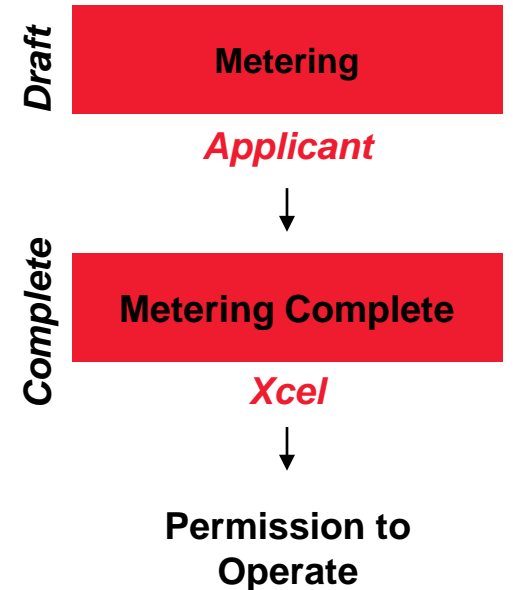
Case #: 04468460

Status: Metering and Testing

Step: Draft

Sub-Step:

App Owner: The meter order(s) for this project has been requested. Xcel Energy will install the meter(s) in approximately 20 business days. If an appointment has been requested, an Xcel Energy metering team member will contact the customer to set an appointment date. If corrections are needed, the Meter Tech will leave a corrections form at the site. Once corrections are completed, please call the number listed on the corrections form to be placed back on the metering installation schedule.



STEP 8: METERING AND TESTING

Field Corrections Needed

- WHEN A METER TECH VISIT THE SITE TO INSPECT SOLAR INSTALLATIONS AND DISCOVERS CORRECTIONS ARE NEEDED, A CORRECTIONS FORM IS LEFT AT THE SITE.
- ONCE THE CORRECTION IS COMPLETED BY THE CUSTOMER/ELECTRICIAN/INSTALLER, PLEASE CALL THE NUMBER LISTED ON THE FORM.
- XCEL ENERGY METERING DEPARTMENT WILL DISPATCH THE SOLAR ORDERS AGAIN AFTER NOTICE THAT THE CORRECTIONS WERE DONE.



Address: _____

Date: _____

Today we were unable to install your new electric meter because we found an issue that needs to be corrected by Xcel Energy Your Electrician*.

Please correct the following issue to ensure the safe operation of your equipment so we can provide you with reliable power: _____

*Please phone _____ when corrections have been made for additional information.

*If not corrected within 15 days from the date of issues, service will be disconnected.

Disconnect date: _____

Meterman write in this space **ONLY** if someone is contacted on the premise.

Miss.
Contacted: Mrs. _____ Remarks _____
Mr.

ECR. No. _____

Signed _____ Date _____

If unable to reach someone at the above phone number within 24 hours, call 800.422.0782 then choose option 1, option 1.

TOP – Xcel Energy Copy | **MIDDLE** – Customer Copy | **BOTTOM** – Crew Copy

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STEP 7: METERING & TESTING

Witness Test Needed

Section 3854(VII). of the Colorado Rules Regulating Electric Utilities (4 CCR 723-3)

- 1 Engineering Review**
Xcel Engineer(s) to indicate if a Witness Test is needed.
- 2 Design & Construction**
Applicant to download "Witness Test Procedure" Document
- 3 Metering & Testing > Notification**
Applicant to schedule Witness Test
- 4 Metering & Testing > Results**
Xcel to perform Witness Test and indicate Pass or Fail.
- 5 Metering & Testing > Witness Test Failed**
Applicant to Reschedule Witness Test and Xcel to perform Witness Test again.
- 6 Permission to Operate > Approved**
Xcel to grant Permission to Operate once Witness Test has Passed.

WITNESS TEST BACKGROUND

Xcel Energy requires that all inverters installed on the electric power system be type-certified through UL 1741. This certification will confirm the inverter's compliance with IEEE 1547, which requires specific responses to abnormal system conditions, as well as default operating parameters. These include anti-islanding capabilities, open-phase detection and response, dynamic power factor schemes (although we currently only allow fixed power factor), and power quality requirements. Prior to allowing commercial operation of a generation system on Xcel Energy's electric power system, some of these functions must be proven by a witness test, performed by a qualified representative of the installer or developer, and witnessed by a qualified Xcel Energy representative.

Several components and settings of the generation system not covered by UL 1741 are critical to protecting Xcel Energy's electric power system infrastructure and maintaining power quality. The two most critical of interest during the witness test are the Ground Referencing and the Fixed Power Factor settings. These component specifications and settings were approved during the Level 2 Initial Review of the interconnection application prior to construction. The Ground Referencing and Power Factor settings need to be verified, typically at the time of the witness test, to ensure the generation system was built as approved by Xcel Energy, and prior to allowing commercial operation of the system.

Case #: 04390405

Status: Metering and Testing

Step: Witness Test

Sub-Step: Notification

App Owner: Your application is pending a Witness Test. Please call our metering shop to schedule your witness test and meter installation (800-422-0782). Xcel Energy: Schedule a witness test.

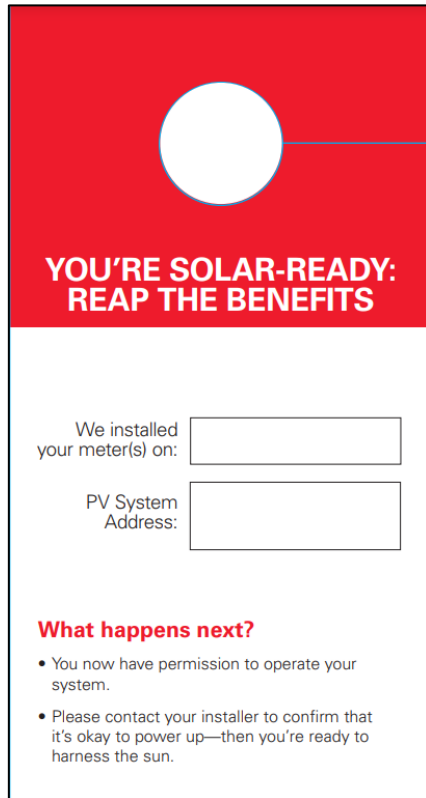
Submit

STEP 9: PERMISSION TO OPERATE

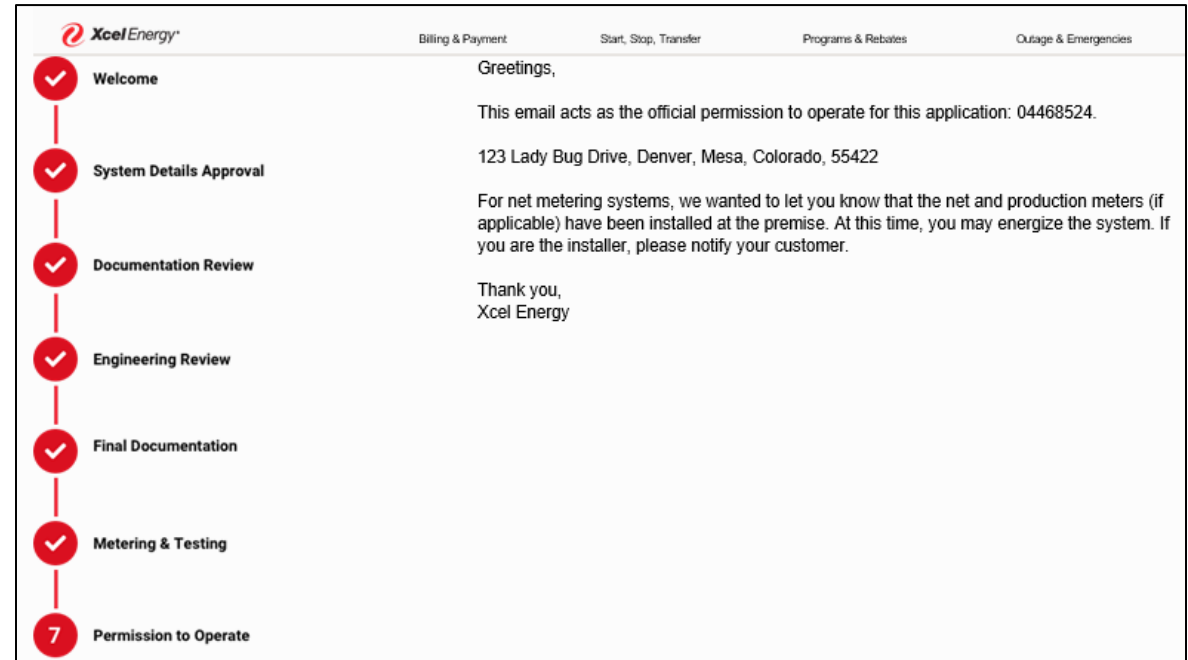
Permission to Operate / Complete

PTO WILL BE PROVIDED IN TWO WAYS:

1 A DOOR HANGER WILL BE LEFT BY THE XCEL ENERGY METER TECH ONCE THE SOLAR METERING INSPECTION IS COMPLETE.



2 THE CUSTOMER WILL RECEIVE AN AUTOMATED EMAIL PROVIDING PERMISSION TO OPERATE ONCE THE METER ORDERS ARE COMPLETED IN THE APPLICATION.



Case #: 04468599
Status: Permission to Operate
Step: Complete
Sub-Step:
App Owner: Your application is complete. No further steps need to be taken at this time. Please reach out to SolarProgram@xcelenergy.com for Solar*Rewards and Distributed Generation, or SolarRewardsCommunity@xcelenergy.com for Solar*Rewards Community if you make changes to or decommission your PV system.

APPENDIX

More Information



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15. [System Removal](#)
16. [Pre-Application Data Requests \(PADR\)](#)
17. [Level 3 Study Process Timelines](#)
18. [Other Renewable Offerings](#)



APPENDIX

Digital Resources

[Net Metering and Billing Info Sheet_2021.pdf \(xcelenergy.com\)](#)

[CO-Residential-New-Home-Estimator.pdf \(xcelenergy.com\)](#)

[Commercial Solar Energy Load Analysis Tool - Phase 2 \(XLS\)](#)

[Residential Solar Added Table - Phase 1 \(XLS\)](#)

[Guideline for Engineering Re-Review](#)

[California Energy Commission - Solar Equipment Lists](#)

[Updates to BTM Grounding External 20210802](#)

APPENDIX

Interconnection Standards

[Interconnection Requirements \(DG Manual\) 10.28.2021](#)

[Xcel Energy Standard for Electric Installation and Use \(PDF\) 12.31.2021](#)



**SAFETY, INTERFERENCE
AND
INTERCONNECTION GUIDELINES
FOR
COGENERATORS, SMALL POWER PRODUCERS
AND
CUSTOMER-OWNED GENERATION**

PUBLIC SERVICE COMPANY OF COLORADO

d/b/a

XCEL ENERGY



Standard
for Electric Installation and Use

APPENDIX

Regulatory Resources

[PSCo_Electric_Entire_Tariff.pdf \(xcelenergy.com\)](#)

[Rates & Regulations | Xcel Energy](#)

[Filings | Xcel Energy](#)

APPENDIX

Metering Requirements

Systems 10 kW DC and less are not required to have a production meter.

- For systems 10.0 KW DC or less with a breaker back feed from the customer's panel, Xcel Energy will not be enforcing any requirements for any associated AC disconnect means. Any requirements will be based on NEC and the local code authority.
- For systems 10.0 KW DC or less that are supply side connection (POI is between the load side of the meter and the main disconnect), Xcel Energy will enforce per Section 2.13.5 item #6 of the [Standard for Electric Installation and Use](#) that the customers' equipment has a mechanical means to disconnect and isolate equipment from the load-side terminals of the self-contained electric meter socket or instrument transformers (CTs and VTs). This would include load/generation of the customer's PV system. The local code authority would typically dictate the type of disconnecting means required based on the Colorado State Statutes that mandates the version of the NEC all jurisdictions are to follow.
- For systems over 10 KW DC, the PV production meter is required, and utility accessible/lockable AC disconnects with visible open is enforced under sections 8.3.2 and 8.3.3 of the [Standard for Electric Installation and Use](#). The requirement is to have one utility accessible/lockable AC disconnect with visible open in the PV circuit located adjacent to the production meter. The PV production meter and AC disconnect are to be located within 10 feet of the main billing meter.
- If an AC Disconnect is installed, does it need to be within 10 feet? For 10kW DC and under, there is no Xcel Energy requirements for distance so follow the mandates by the local AHJ. We will only validate if a disconnecting means is installed for systems with the POI being a line side tap.

APPENDIX

Metering Requirements Cont...

- Metering requirements are listed in the [DG Interconnection Guidelines](#), starting on page 27.
- Required Disconnect Labeling is shown on page 46.
- Brass tags are a solar installers responsibility to install. If there is an apartment number or it is a 2nd production meter, it must be noted on the tag. Tags can be brass, aluminum or stainless steel and MUST BE permanently attached to the meter socket.
- The production meter shall be located within ten (10) feet of the existing billing meter. If this cannot be accomplished, additional labeling at each meter directing personnel to the other meter location is required. Production meter locations will be addressed during the metering engineering review.
- Exceptions on meter locations must be approved by the local Electric Meter Shop.

APPENDIX

New Construction

New Construction Permanent Premise and Account Creation

To start an interconnection application, a permanent premise and account number is needed. The person or company/builder currently listed on the Xcel Energy account as the owner of the property can request these numbers by completing a Builders Call Line (BCL) [FastApp Application](#) online. When filling out the form, check the “**Solar**” checkbox which will send an automated email listing the Premise number – typically within three business days. Then call Customer Service at 1-800-895-4999 to obtain the Account number (Account #s are considered confidential information and cannot be sent via email). These numbers should be provided to the solar installer/Applicant Agent to start the interconnection request in the DER application portal. If there is no active meter onsite, the solar installer may need to wait a day or two for the BCL FastApp application to registers the new numbers in the portal so the permanent premise and account numbers are accepted.

APPENDIX

Assignment of Contract – Moving or Relocating

Section 3854(x). of the Colorado Rules Regulating Electric Utilities (4 CCR 723-3)

Most solar rooftop installations are tied to a contract with us, which requires a transfer of ownership. The transfer of ownership is commonly referred to as the Assignment of Contract. If you are moving, take the time to read the

[Assignment of Contract](#) to learn how to transfer ownership of your solar.

"Assignment/Transfer of ownership of the facility. The interconnection agreement shall survive the transfer of ownership of the small generating facility to a new owner when the new owner agrees in writing to comply with the terms of the agreement and so notifies the utility".

APPENDIX

Adding Equipment to the Portal


- We accept all UL 1741 certified equipment.
- Equipment not listed in DER Portal? Send a screenshot from [Solar Equipment Lists | California Energy Commission](#) to SolarProgram@xcelenergy.com like the one below. We will add the equipment in the order the email is received. Sample screenshot below:

Manufacturer	Model Number	Description	Safety Certification	Nameplate Pmax	PTC
				(W)	
Ablytek	6MN6A270	270 W Monocrystalline Module	UL 1703	270	242.1

- If the equipment is not listed on the California Energy Commission's Solar Equipment List, please follow the directions on their website to request that equipment be added to the list.

APPENDIX

Customer Welcome Email example



Billing & Payment Start, Stop, Transfer Programs & Rebates Outage & Emergencies

- 1 Welcome**

JESSICA R MITCHELL ,

Thank you for your interest in interconnecting solar to Xcel Energy's grid! We're thrilled you've chosen to power your life with the sun, and we look forward to working with you and your solar installer.
- 2 System Details Approval**
- 3 Documentation Review**

IMPORTANT: To ensure your electrical service and local transformer have been reviewed for safety and reliability, we **require** all orders to follow the interconnection process shown to the left, **before** a new system can be activated.

Depending on the complexity of your solar system's interconnection to the electric grid, the interconnection process may take anywhere from 30 to 90 days. Please review our [Application Process](#) webpage to better understand the stages of interconnection.

Application Process
- 4 Engineering Review**

CONFIRMED: A Distributed Energy Resource (DER) interconnection application has been submitted in your name for the installation at: 123 lane, Denver , , 12323

Interconnection Application Number: 04468890
Solar Sundays Solar Sundays
- 5 Final Documentation**
- 6 Metering & Testing**

What's next?

 - Your solar installer will complete the initial application steps, including submitting contact information, system details, and supplemental documentation.
 - Next, the Engineering Process Fee will be paid. Your solar installer will additionally upload engineering documentation e.g. Site Plan and Line Diagram.
 - You'll receive a link to the Solar Bank Election form via email to select an option and to provide your electronic signature. View the Solar Bank Election form ahead of time to review your available options prior to making your decision on the form. [Solar Bank Election](#)

Xcel Energy highly recommends that the system is not installed until the application has passed all of the engineering screens.
- 7 Permission to Operate**

LEARN MORE: Visit the Net Energy Metering webpage, which contains detailed information about the interconnection process and links to additional resources.
[Net Energy Metering | Xcel Energy](#)
[Net Metering and Billing Info Sheet](#)

We know that you and your solar installer will be working together throughout this process, and typically they will manage the solar interconnection application on your behalf. If you have questions, we suggest contacting your solar installer first, since they'll be most familiar with the details of your planned system. However, as your electric provider, we're also here to help.

APPENDIX

Solar*Rewards Project Extension Request

- Extension are only necessary for Solar*Rewards applications that have specific application timelines (typically 18-months)
- If you anticipate needing an extension for your project, please complete the [Solar*Rewards Extension Request Form \(PDF\)](#) at least 2 weeks prior to the project expiration date. Also downloadable from the Solar Developer webpage under Forms.

Colorado

Clear form



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 upload a completed form to the online interconnection application or email to solarprogram@xcelenergy.com.

Application details

Application OID #

Customer name

System installation address

APPENDIX

CT Cabinet Requests

In System Details select “CT Cabinet Needed” equals “Yes” when a Current Transformer (CT) is required for the project.

Xcel Energy will have the CT ordered then Applicant Agent will coordinate the CT Deliver by using the Chatter feature in the application.

Please allow 3-weeks for delivery after the order has been placed.

System Details

* Estimated Project Cost
20,000.00

* System Inverter Phase
One Phase Three Phase

CT Cabinet Needed
Yes No

System Replacement & Expansion

Back Next

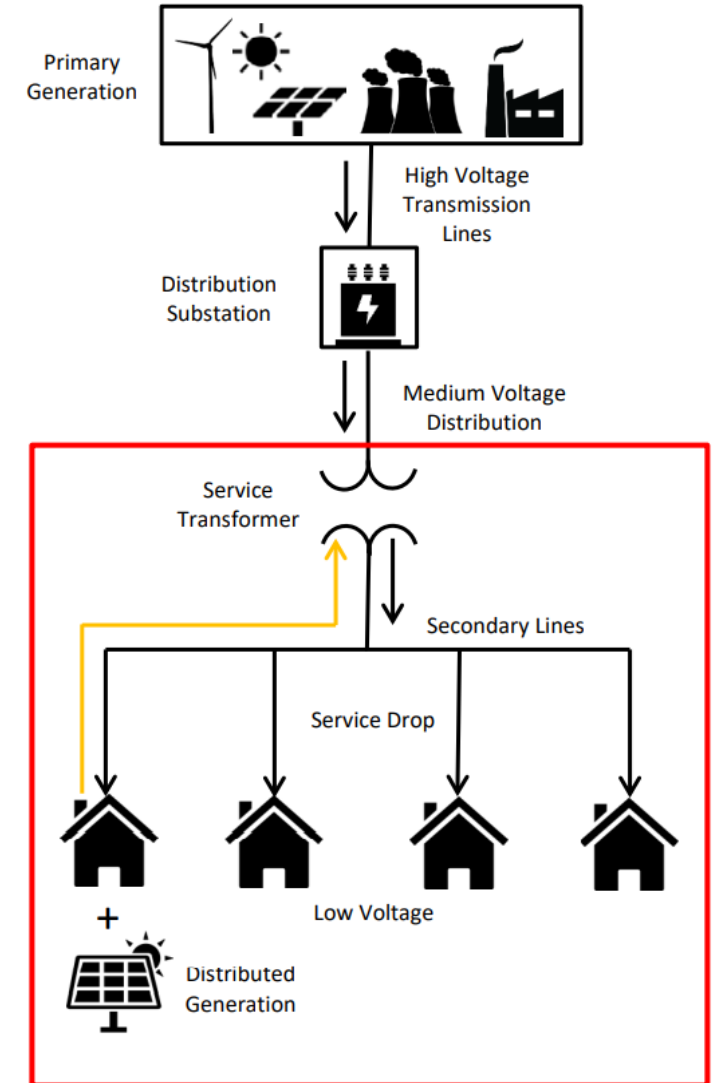
ACTION NAME	DESCRIPTION	STATUS	RESPONSIBLE PARTY	REQUIRED?	ACTION
Order CTs	Xcel Energy to work on ordering CTs.	Open	Xcel Energy	<input checked="" type="checkbox"/>	Action

APPENDIX

Distribution Upgrades

What criteria does Xcel Energy use to determine when distribution upgrades (including transformers) are to be upgraded?

- Secondary voltage rise is the main criteria Xcel Energy Area Engineers use to make this decision for residential solar installations. Please see the attached voltage rise calculations worksheet detailing the calculations used to determine when unacceptable levels of secondary voltage rise are anticipated.
- [Voltage Rise Calc Sheet.pdf \(xcelenergy.com\)](#)



APPENDIX

Distribution Upgrades as Plant Betterment

The Area Engineer identifies the existing transformer or secondary as being overloaded prior to the solar interconnection application. Upgrades are initiated by the Area Engineer to bring secondary distribution up to current design standards.

Who Pays: Xcel Energy

Expected timeline: Solar interconnection application is put on hold until the upgrades have been completed. 3-6 months on average.

How to get updates: Xcel Energy assigned Designer

Engineering Rejection Comment:

The current transformer and secondary layout will not be able to accommodate this solar addition. However, the existing transformer is overloaded or does not meet our standard design practices, and this has initiated upgrade to the system at Xcel Energy's cost. This application can be approved once the work is complete, which could take up to 6 months. We have reached out to the designer (if one has been assigned) and requested they reach out to the listed Installer Contact in this application regarding this upgrade and timeline. You may also reach out to the Builders Call Line at 800-628-2121 and inquire about the expected timeline for the upgrade.

APPENDIX

Distribution Upgrades for Solar System Interconnection

The Area Engineer identifies that the proposed solar system will cause unacceptable secondary voltage rise or exceed the transformer's hosting capacity and will require an upgrade.

Who Pays: Customer pays

In some cases, the customer may have the option to downsize the proposed system to avoid upgrades. In this case, the application is sent back to the System Details stage where the Array and Inverter details may be adjusted, and new designs uploaded. The application is then reviewed at the reduced size.

Expected timeline: Solar interconnection application is put on hold until the transformer upgrade has been completed. 3-6 months on average.

How to get updates: Xcel Energy assigned Designer

Engineering Rejection Comment:

The distribution transformer and secondary conductor serving this premise are unable to accommodate additional DG due to [secondary voltage rise/transformer DG capacity]. The maximum system size allowable without upgrades to the distribution system is XX.XX kVA [omit if zero].

In order to accommodate the full YY.YY kVA [AC] system, the following distribution upgrades are required:

Item 1,2,3

These upgrades are at cost to the interconnecting customer. To apply for these upgrades, please contact the Builder's Call Line at 800-628-2121 or submit a FastApp at https://xcelenergy.force.com/FastApp/BR_Login. A sketch of the required upgrades is also provided in the attachments section of the application.

APPENDIX

Meter Aggregation

Aggregation uses any excess generation in a given month to offset usage on the adjacent aggregate premises in the order that the customer provides in their aggregation request.

The main requirements are below, all of which are provided by the Customer/Installer and verified by the Xcel Energy Program Office.

The system needs to have been interconnected on or after 1/14/2012 to be eligible for aggregation as that's when the rule change took effect.

- Same customer
- Same rate class
- Same or Contiguous property

Meter aggregation can be applied to:

- 200% rule evaluation for solar system sizing
- Application of excess generation kWh credits in a water falling manner to other meters

APPENDIX

SPVTOU Qualifications - [SCHEDULE SPVTOU Sheet 49 of PSCO Electric Rate Book](#)

SPVTOU A:

Each premise must qualify independently for SPVTOU A by meeting the following: (1) participate in the Company's Solar*Rewards Medium program prior to 2017; (2) Customer's service loads must be between 25 and 500 kW; (3) had a minimum "average" load factor for the 12 months previous to the installation of their on-site solar of 30%; and (4) installed their PV system **after** June 1, 2010.

SPVTOU B:

Each premise must qualify independently for SPVTOU B by meeting the following: (1) participate in the Company's Solar*Rewards Medium program beginning January 1, 2017 or later; (2) PV system must have a capacity of at least 10 kW; (3) has a minimum "average" load factor for the 12 months previous to the installation of their on-site solar of 30%; and (4) a minimum of one month in the most recent 12 month history must have a service load of at least 25kW and no more than 500kW (Actual Demand kW) and the 12-month average must be between 25kW and 500 kW of demand.

Metering Notes

A load profile meter is necessary before billing on SPVTOU. If the Customer does not have one currently, then a load profile meter will be ordered as part of the solar meter exchange order once the solar application is complete through the online portal.

APPENDIX

System Replacement

How to notify Xcel Energy of a 1:1 system replacement?

When the existing solar system has been removed because of construction or roof replacement and the same system will be re-installed, a new application is not needed. The Solar Team will require the following:

Provided revised site plan and line diagram to solarprogram@xcelenergy.com with notice that the system was re-installed.

Xcel Energy engineer will compare plans to original plans to ensure system has not changed by more than 10% and current requirements are met.

Once confirmed, installer send to solarprogram@xcelenergy.com a new final electrical inspection. Solar Team will request solar meters if they were removed and provide permission to operate once meters are installed.

Solar Team will upload all documentation related to the replacement to the original solar application for our records.

APPENDIX

System Removal

Section 3854(IX). of the Colorado Rules Regulating Electric Utilities (4 CCR 723-3)

Please notify if a system has been removed and does not intend to be replaced by sending an email to solarprogram@xcelenergy.com.

- The Net bi-directional meter will be replaced with a general billing service meter and the PV Production meter will be removed from the premise (if one was installed).
- If a system is going to be offline for more than 90-days for construction purposes (i.e. roof replacement), notify the Solar Program Team so that the account does not get flagged for non-production and have a meter removal order logged.

IMPORTANT!

Please never remove the NET or PV production meters as they are the property of Xcel Energy.

Termination. The interconnection agreement to operate in parallel may be terminated under the following conditions.

(A) By the customer by providing written notice to the utility.

(B) By the utility if the interconnection resource fails to operate for any consecutive 12-month period or the customer fails to remedy a violation of these terms and conditions.

(C) Permanent disconnection. In the event the interconnection agreement is terminated, the utility shall have the right to disconnect its facilities or direct the customer to disconnect its interconnection resource. CODE OF COLORADO REGULATIONS 4 CCR 723-3 Public Utilities Commission 173

(D) Survival rights. The interconnection agreement shall continue in effect after termination to the extent necessary to allow or require either party to fulfill rights or obligations that arose under the agreement.

APPENDIX

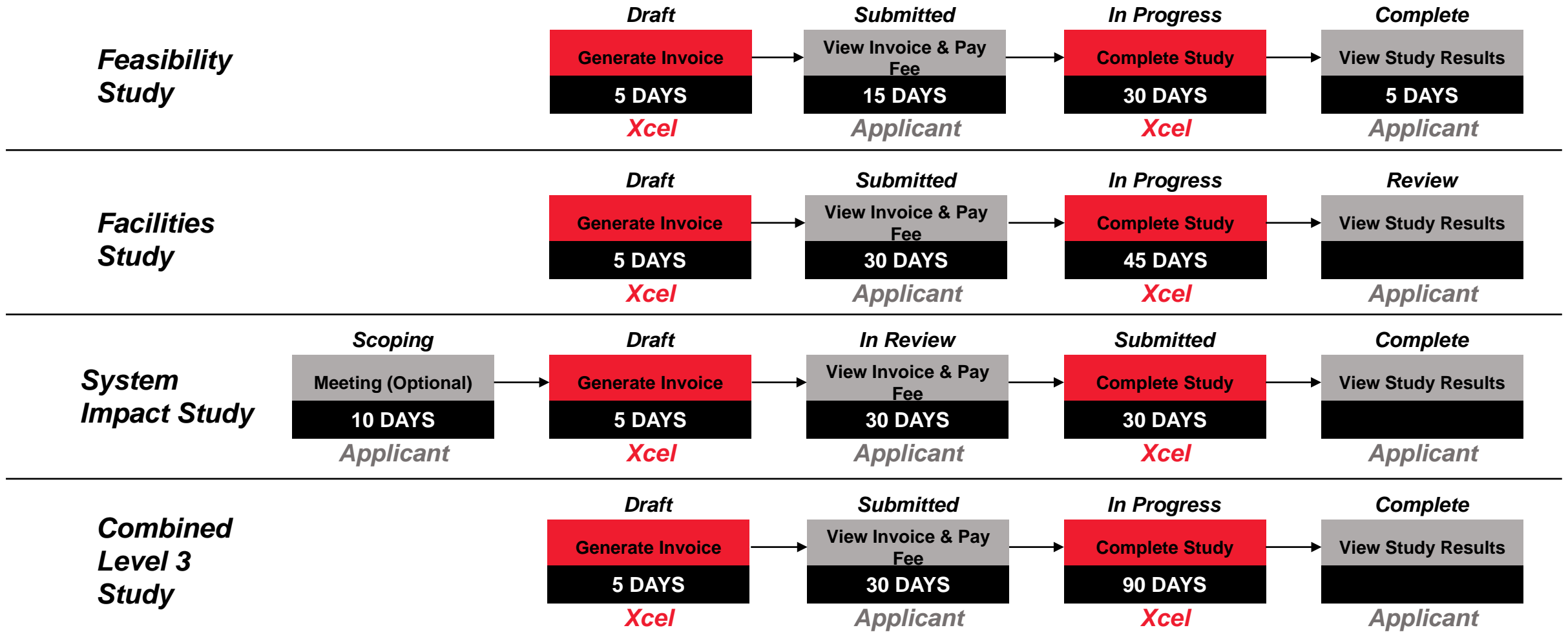
Pre-Application Data Request (PADR)

Section 3853(a)(IV) of the Colorado Rules Regulating Electric Utilities (4 CCR 723-3)

See Pre-Application Data Request Process Guide [here](#)

APPENDIX

Level 3 Study Process Timelines



APPENDIX

Other Renewable Offerings

[Renewable Energy | Xcel Energy](#)



THANK YOU

Solar and DG Interconnection Team | Colorado

May 2022