Interconnection Process Training:
Solar*Rewards Community
January 6, 2020
*Disclaimer*
This PPT Manual is frequently revised.

Please use the web version **only**, To ensure the most up-to-date information.
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Welcome to the Virtual Phase 2 MN S*RC Interconnection Process Training

**Goal:** To provide developers with the information to complete Xcel Energy’s interconnection application process in the new portal, in a timely manner with little to no errors or delays.

Achieving the above goal will aid in meeting or exceeding our mutual customer’s expectations, in terms of interconnection timelines, resulting in an overall increase in customer satisfaction.
What Can I Learn From This Training?

- **New Developers:** Familiarize yourselves with the basics of the solar garden application and interconnection process, and find answers to common questions.

- **Current Developers:** Continue your education, learn about best practices and familiarize yourself with the new portal.

Didn’t get a personal invite? Email SRCMN@xcelenergy.com and ask to be added to the Workgroup Members Distribution List.
Team Introductions

- **SRCMN Program Mgmt. Team (PMO)**
  - Crystal Pomerleau, Program Manager
  - Rehana Power, Marketing Assistant
  - Logan Johnson, Marketing Assistant

- **SRCMN@xcelenergy.com**

- **Internal Team Players**
  - Design/Construction
  - Builders Call Line
  - Metering
  - Engineering
  - Billing
  - BSC (Business Solutions Center)

- **External Industry Team Players**
  - Garden Operators
  - Subscribers/Customers
  - Financers
  - Local Inspectors
  - Government/Regulators
  - Many More
Bi-Weekly Calls with PMO

• **Conference call** set up on bi-weekly basis once an operator has at least one (1) application in "Program Approval"

• **Purpose**: discuss program and project specifics with Xcel Energy Program Management Team

• Agendas required 48 hours prior to the meeting

• Xcel Energy Technical Resources and Designers do *not* attend
  – Xcel Energy Engineers may attend as needed based on submitted agendas
Navigating the Portal
What is a Case?

• Each Application will have a Case #
  – SRC#'s will now be assigned later in the process

• Replacing Legacy Steps
  – Each case will have a:
    • Status, Step, and Sub-Step
  – Each “Status” i.e. Program Approval, will have a corresponding Step, and Sub-Step
For each “Action Item”

• Open
  – On Developer to complete

• Draft
  – Developer has completed but not yet submitted

• Finalized
  – Action Item has been submitted to Xcel Energy for review
How do I e-Sign?

• We use Sertifi E-contracts

• E-Signatures will be routed to you via email. Review the chart on the following slide to see where each e-Sign requirement is routed.

• Once complete, you will need to refresh the application page for the “Action Item” to update to “Draft”

• The App Agent and Customer emails must be different for e-signing
  – Some docs go to App Agent for signature, some to Customer for signature - these cannot be combined and signed by the same email
<table>
<thead>
<tr>
<th>Status</th>
<th>Action Item</th>
<th>Document Name</th>
<th>Routed to</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program Approval</td>
<td>Program Approval eSign</td>
<td>Deposit Fee Form eSign</td>
<td>App Agent</td>
</tr>
<tr>
<td>Program Approval</td>
<td>Program Approval eSign</td>
<td>Interconnection Application Summary eSign</td>
<td>Customer (Developer/Owner)</td>
</tr>
<tr>
<td>Initiate Application</td>
<td>Initiate Application eSign</td>
<td>MN Engineering Process Fee eSign</td>
<td>App Agent</td>
</tr>
<tr>
<td>Supplemental Review</td>
<td>Supplemental Review SOW eSign</td>
<td>Supplemental Review SOW eSign</td>
<td>App Agent</td>
</tr>
<tr>
<td>System Impact Study</td>
<td>System Impact Study eSign</td>
<td>System Impact Study SOW eSign</td>
<td>App Agent</td>
</tr>
<tr>
<td>System Impact Study</td>
<td>System Impact Study eSign</td>
<td>System Impact Study Agreement</td>
<td>App Agent</td>
</tr>
<tr>
<td>Transmission Study (Rare)</td>
<td></td>
<td>Transmission Study SOW</td>
<td>App Agent</td>
</tr>
<tr>
<td>Facility Study</td>
<td>Facilities Study eSign</td>
<td>Facilities Study SOW</td>
<td>App Agent</td>
</tr>
<tr>
<td>Interconnection Agreement</td>
<td>Interconnection Agreement eSign</td>
<td>MNDIA</td>
<td>Customer (Developer/Owner)</td>
</tr>
<tr>
<td>Design and Construction</td>
<td>Stated Address Amendment eSign</td>
<td>Address Amendment</td>
<td>App Agent</td>
</tr>
</tbody>
</table>
E-Payments

• E-Payments can take up to 48 hours to be received

• Once payment has been received that action item will change from Open to Draft in the portal
Interconnection Application Process
Overview of Case “Status”

Status in the Portal

- **Pre-Application**
  1. Program Approval
  2. Initiate Application
  3. Initial Engineering Screens
  4. Supplemental Review
  5. System Impact Study
  6. Transmission Impact Study (rare)
  7. Facilities Study
  8. Interconnection Agreement
  9. Design and Construction
  10. Metering and Testing
  11. Permission to Operate

Relation to Pre-MNDIP Process and Legacy Portal

- Replaces the old "Capacity Screens" and the paper forms for pre-applications
- These two combine are the old “Completeness Review” or legacy Steps 1-3
- These combined are the old “Scoping Study” or legacy Step 4
- Facilities Study incorporates initial Design processes prior to Interconnection Agreement
Case “Status”

- **Pre-Application**
  1. Program Approval
  2. Initiate Application
  3. Initial Engineering Screens
  4. Supplemental Review
  5. System Impact Study
  6. Transmission Impact Study (rare)
  7. Facilities Study
  8. Interconnection Agreement
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  11. Permission to Operate
Pre-Application Process

• Snap-shot of estimated site capacity before formally applying
• Check first:
  – Map of MN Service Territories
  – Interactive Hosting Capacity Map
• $300 Processing Fee
• This process is done 100% on the portal
  – No physical or PDF documents need to be mailed nor emailed in
  – Payments are made online
• Results will be provided in 15 business days
* The capacity screen data only includes existing data. A request for a capacity screen does not obligate Xcel Energy to conduct a study or other analysis of the proposed DER in the event that data is not readily available. If Xcel Energy cannot complete all or some of a capacity screen report due to lack of available data, Xcel Energy will provide the Interconnection Customer with a capacity screen report that includes the data that is available. The provision of information on "available capacity" does not imply that an interconnection up to this level may be completed without impacts since there are many variables studied as part of the interconnection review process. The distribution system is dynamic and subject to change, and data provided in the capacity screen report may become outdated at the time of the submission of the complete Interconnection Application. Xcel Energy will, in good faith, include data in the capacity screen that represents the best available information at the time of reporting.
Pre-Application Process

Pre-Application Report Request Form

Requests for an Interconnection Pre-Application Report shall include the information identified in Sections 1.4.1.1 through 1.4.1.8 of the Minnesota Distributed Energy Resource Interconnection Process (MN DIP) (and as provided in the fields below) to clearly and sufficiently identify the location of the proposed Point of Common Coupling and relevant project details.

Additionally, a non-refundable processing fee of $300 is required as specified in Section 1.4.1 of the MN DIP.

Upon receipt of a complete Request Form (including site map) and processing fee, the Area EPS Operator shall provide a report containing as much of the data described in Section 1.4.2 as is pre-existing and available within 15 business days. A Pre-Application Report request does not obligate the Area EPS Operator to conduct a study or other analysis of the proposed project if data is not available.

Click "NEXT" to start the Pre-Application Report Request Form.

- Pre-Applications can be found on the homepage next to the Application tab
Pre-Application Process

First Pre-App Screen

Requestor Contact Information

* Required

- Name
- Company Name (If applicable)
- Street Address
- City
- State
- Zip Code
- Phone Number
- Email Address

Next

Back

Second Pre-App Screen

Project Information

* Required

- Project Name
- DER Nameplate Rating (kW)
- DER Type
- DER Number of Phases
  - Single Phase
  - Three Phase
- Service Voltage
- Hard-wire Generator (no onsite fuel)?
  - Yes
  - No
- Existing DER?
  - New DER(s)
  - Material Modification
Pre-Application Process

Congratulations, you successfully started your interconnection Pre-Application Report request.

Your application number is [redacted]

To complete the Pre-Application Report request, click "Complete Pre-Application" and follow the provided steps.

Complete Pre-Application

Click *Complete Pre-Application* to move into the Widget and see your required Action Items.

- Once your Action Items are complete, they will move from Open to Draft status.
- Then click Finalize to submit the Pre-Application (can't be submitted without finalizing)
Pre-Application Process

• In the portal you will see your Pre-application is now in Review
• All notifications will be sent to the email previously input
• Results will live and be accessible in the portal
Pre-Application Details

• Pre-Applications are indicative, and not a comprehensive study-ready view of a substation.
  • To offer that type of thorough investigation would not be possible in the 15-day timeline and at the $300 cost for Pre-Applications.

• Pre-Applications are not typically be able to discern any feeder level upgrades or capacity due to voltage rise
  • This type of limitation is not something that shows up in a Pre-Application.

• Missed generation on a Pre-Application does occur from time to time, and we have communicated with the workgroup and developers as to the level of rigor and completeness to expect.

• As a matter of program practice, non-comprehensive Pre-Applications are not grounds for a refund of your Interconnection Study costs. Interconnection studies are tied to a specific application, Pre-Applications are a more general view and are not tied to a specific application, this complicates the idea of notification during the study process if additional generation is discovered.

• We have worked to investigate industry practices, and the level of accuracy and detail we provide in our Pre-Applications is in line with industry norms.

• The level of accuracy and detail provided by Pre-Applications has been thoroughly discussed and explored through the workshops creating the Minnesota Distributed Energy Resources Interconnection Process, which was approved by the MN PUC on April 19, 2019, and took effect June, 2019.
Case “Status”

- Pre-Application
  1. *Program Approval*
  2. Initiate Application
  3. Initial Engineering Screens
  4. Supplemental Review
  5. System Impact Study
  6. Transmission Impact Study (rare)
  7. Facilities Study
  8. Interconnection Agreement
  9. Design and Construction
  10. Metering and Testing
  11. Permission to Operate
Applying Online

You will need to know your Garden Decimal Degree (DD) Coordinates and name to enter your application.
Status 1. Program Approval

• “Step” will be:
  – Draft – on Developer to complete Action Items
  – eSign – Developer to eSign Deposit form and Customer to sign Application Summary
  – In Review – with Xcel Energy
  – On Hold – Developer to provide additional items
Program Approval “Action Items”

- **Contact Information** - Input
- **Proof of Site Control** – Upload
- **Solar Garden Application Fee** – e-Payment ($1,200)
- **State Certification** – Upload
- **System Details** – Input (Basic Details)
- **Application Details** – Input (Technical Details)

Before you submit anything, if you want to change Track to from Fast to Study, notify Xcel Energy immediately

**We will not change your track once Program Approval items are Submitted**
Contact Information for CSG’s

- **Interconnection Customer**
  - *(Customer Contact/System Owner)*
  - This is where you enter the entity (LLC) owner of the garden
  - CompanyOperations@company.com
  - Email address can be same across multiple applications, or can be unique

- **Application Agent/Company**
  - This is where you enter the Primary Application Manager’s (PAM) contact information
  - First.Last@company.com
  - Email address for Interconnection Customer, and Application Agent must be different

- **Installer/Developer**
  - If the developing company differs from the LLC entity that owns the garden, input that here.

- **Your contact information has been saved**
  - Navigate back to application page, refresh for the Action Item’s Status to update from “Open” to “Draft”
Contact Information Location

<table>
<thead>
<tr>
<th>Actions</th>
<th>Finalized Actions</th>
<th>Milestones</th>
<th>Completed Milestones</th>
<th>Application Details</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

- Application Information
- Customer Information
- Application Agent/Company Information
Proof of Site Control

• See MNDIP Section 1.7
  – Sheet No. 10-180
Office of the Minnesota Secretary of State
Certificate of Good Standing

I, Steve Simon, Secretary of State of Minnesota, do certify that: The business entity
listed below was filed pursuant to the Minnesota Chapter listed below with the Office of
the Secretary of State on the date listed below and that this business entity is registered to
do business and is in good standing at the time this certificate is issued.

Name:  
Date Filed:  
File Number:  
Minnesota Statutes, Chapter:  
Home Jurisdiction:  

This certificate has been issued on:

Steve Simon  
Secretary of State  
State of Minnesota

State Certificate of Good Standing
Application Details

• Review to make sure “Customer Information” reflects the LLC owner of the garden

• Review to make sure “Application Agent/Company Information” reflects the Primary Application Manager
Program Approval – e-Sign

1. Deposit Confirmation – Upload
   1. To verify that this is in escrow with US Bank
   2. Deposit Fee is $100/kW

2. Program Approval eSign – eSign
   1. (Program) Deposit Form – eSignature
   2. Application Summary
Deposit Confirmation

• Deposit Confirmation – Upload
• If Escrow Deposit:
  • Required item to be uploaded is the email from US Bank confirming funds are received and deposited
  • Ex:

  All,

  Funds are received and deposited for [redacted]

  Any questions or concerns please feel free to contact me,
  Thank you,

  Lien Nguyen
  Trust Officer | Corporate Trust Escrow Analyst

• Schedule E
• If you are paying via Wire:
  • Required item to be uploaded is the full Wire Confirmation (this must include the Case#, Deposit Amount, confirmation the payment was submitted and the date)
Program Approval Timeline

• All required Action Items throughout Program Approval are due within 30 business days of the Application being submitted

• Once Program Approval has been finalized, Xcel Energy will review all submitted items and Approve or Reject with comments on required changes within 5 business days
Case “Status”

• Pre-Application
  1. Program Approval
  2. **Initiate Application**
     3. Initial Engineering Screens
     4. Supplemental Review
     5. System Impact Study
     6. Transmission Impact Study (rare)
     7. Facilities Study
     8. Interconnection Agreement
     9. Design and Construction
    10. Metering and Testing
    11. Permission to Operate
Status = Initial Application

• “Step” can be:
  – **Draft** – on Developer to complete Action Items
  – **In Review** – with Xcel Energy
  – **On Hold** – Developer to provide additional items
  – **Complete** - Application will be routed by Xcel Energy to the next appropriate Step based on your track.
Initiate Application – “Action Items”

- **Engineering Process Fee** – ePayment
  - Certified Fast Track: $100 + $1/kW
  - Non-Certified Fast Track: $100 + $2/kW
  - Study Track: $1,000 + $2/kW

- **Initial Application eSign** – eSign
  - Engineering Process Fee SOW
    - Email routed to “Applicant Agent”/Company

- **(Inverter) Specification Sheet(s)** – Upload

- **Site Plan** - Upload

- **Single-Line Diagram** - Upload

- **Documentation of Protection/Control Schemes** – Upload
  - (Usually covered in Single-Line diagram)

- **Annotated Aerial Map** - Upload
Initiate Application – Next Steps

• Once all items are in “Draft” click **Finalize**

• All required Action Items must be finalized within 30 business days
 Initiate Application

• Xcel Energy will review for completeness and Approve or Reject with comments on required changes within 10 business days

• Once approved, Garden “Deemed Complete”
  – Queue position established
  – VOS rate established

• Xcel Energy will route for screens and/or study
  – If a project ahead in queue is currently in Screens/Study your project will be put *On Hold* until the ahead in queue moves into Design
Case “Status”

- Pre-Application
  1. Program Approval
  2. Initiate Application
  3. *Initial Engineering Screens*
  4. Supplemental Review
  5. System Impact Study
  6. Transmission Impact Study (rare)
  7. Facilities Study
  8. Interconnection Agreement
  9. Design and Construction
  10. Metering and Testing
  11. Permission to Operate
Initial Engineering Screens

• Cost covered within “Engineering Process Fee”
• 15 business days for results
• PDF results will be provided into Portal
• Optional “Customer Options Meeting”
  – To go over Initial Review Results
  – Contact SRCMN@xcelenergy.com to schedule
  – Recommend by-passing and going right into “Supplemental Review”
Initial Engineering Screens

• Available “Steps”:
  – In Review
    • Sub-Step: Engineering Screens (Fast)
  – Pending Applicant Decision (you have 10 business days to proceed with one of the provided options)
    • Possible Options depending on results of project:
      – Supplemental Review Screens
      – System Impact Study
      – Facilities Study
      – Customer Options Meeting
      – Withdraw
Initial Engineering Screens

- Initial Review Screens
  - Pass: Facilities Study, Withdraw
Case “Status”

• Pre-Application
  1. Program Approval
  2. Initiate Application
  3. Initial Engineering Screens
  4. **Supplemental Review**
  5. System Impact Study
  6. Transmission Impact Study (rare)
  7. Facilities Study
  8. Interconnection Agreement
  9. Design and Construction
  10. Metering and Testing
  11. Permission to Operate
Supplemental Review

• Step: “Draft”
  – Action Items:
    • Supplemental Review Fee – ePayment ($200)
    • Supplemental Review SOW eSign – eSign
      – Email routed to “App Agent”
• Provide both within 15 business days
• Once Finalized, Step will update to “Submitted”
Supplemental Review

• Step: “Submitted”
  – Xcel Energy will provide results within 30 business days

• Steps: “Failed Supplemental Review”
  – Sub-Step: “Pending Applicant Decision”
  – 15 business days to proceed with Scoping Meeting, move to System Impact Study or Withdraw

• If your project passes review
  – Facilities Study
  – MNDIA
Supplemental Review Options

Supplemental Review Screens

- Pass
  - Facilities Study
  - MNDIA

- Fail
  - System Impact Study
  - Facilities Study
  - Transmission (or Other Specialized) Study
  - Scoping Meeting
  - Withdraw
Scoping Meeting

• If you proceed with a Scoping Meeting
  – Must schedule the Scoping Meeting within 15 business days of receiving results
  – You have 10 business days after the meeting to proceed with the System Impact Study or Withdraw the project
Case “Status”

- Pre-Application
  1. Program Approval
  2. Initiate Application
  3. Initial Engineering Screens
  4. Supplemental Review
  5. *System Impact Study*
  6. Transmission Impact Study (rare)
  7. Facilities Study
  8. Interconnection Agreement
  9. Design and Construction
  10. Metering and Testing
  11. Permission to Operate
System Impact Study

• Step: In Review
• Action Items:
  – System Impact Study eSign
    • SOW and Agreement
  – System Impact Study Fee ($12,000)
  – Must submit and finalize these items within 20 business days
• Step: Submitted
  – Xcel Energy will provide results within 30 business days
  – Results will be available in the Portal
Case “Status”

- Pre-Application
  1. Program Approval
  2. Initiate Application
  3. Initial Engineering Screens
  4. Supplemental Review
  5. System Impact Study
  6. *Transmission/Other Specialized Study (rare)*
  7. Facilities Study
  8. Interconnection Agreement
  9. Design and Construction
  10. Metering and Testing
  11. Permission to Operate
Transmission/Other Specialized Study

• Transmission Impact Studies and Substation Specialized Studies will be rare

• Substation Specialized Studies are anticipated to be $76,000
  – Projected timelines will be 15+ weeks

• An SOW and Notice will be provided with details on the upgrades and work needed
Case “Status”

• Pre-Application
  1. Program Approval
  2. Initiate Application
  3. Initial Engineering Screens
  4. Supplemental Review
  5. System Impact Study
  6. Transmission/Other Specialized Study (rare)
  7. **Facilities Study**
  8. Interconnection Agreement
  9. Design and Construction
  10. Metering and Testing
  11. Permission to Operate
Facilities Study

• Facilities Study required if any upgrades or construction is needed

• Action Items:
  – Facilities Study eSign
    • SOW and Agreement
  – Facilities Fee ($10,000)

• Step: Draft
  – Xcel Energy will provide results within 45 business days
  – Results will be available in the Portal
Facilities Study

• Facilities Study Results Provided
• Facilities Study Results Meeting
  – Can only be omitted if mutually agreed upon (in the portal) between both developers & Xcel
  – Can provide comments on the Facilities Study Report Draft
    • Via DER Facility Study Customer Comments (downloadable page)
    • Comments are optional

• IA issued by Xcel within approximately 15 business days if you provided written comments (5 business days if you did not)
Case “Status”

• Pre-Application
  1. Program Approval
  2. Initiate Application
  3. Initial Engineering Screens
  4. Supplemental Review
  5. System Impact Study
  6. Transmission Impact Study (rare)
  7. Facilities Study
  8. *Interconnection Agreement*
  9. Design and Construction
  10. Metering and Testing
  11. Permission to Operate
Interconnection Agreement (MN DIA)

• Xcel Energy will provide the Interconnection Agreement within 5 business days
• Once available, you will have 30 business days to eSign the IA and provide payment
  – IA payment is *not* an e-payment
• Xcel Energy will counter-sign within 5 business days
Wire/Check Payment Directions

Paying by Wire:
Bank: Wells Fargo Bank, N.A.
City/State: San Francisco, CA
Routing/ABA: 121-000-248
Acct. No: 31966
Acct. Name: NSPM

Paying via Check:
Xcel Energy
Customer Receivables
Solar*Rewards Community MN
P.O. Box 59
Minneapolis, MN 55440-0059
Case “Status”

- Pre-Application
  1. Program Approval
  2. Initiate Application
  3. Initial Engineering Screens
  4. Supplemental Review
  5. System Impact Study
  6. Transmission Impact Study (rare)
  7. Facilities Study
  8. Interconnection Agreement
  9. **Design and Construction**
  10. Metering and Testing
  11. Permission to Operate
Design and Construction: In the Portal

3 “Steps”:

• **In Progress**
  – Xcel Energy to provide Construction Schedule

• **Documents Pending**
  – Developer to complete Action Items
  – All items need to be in “Draft” to “Finalize”
  – Submit **early** in event of multiple review rounds

• **In Review**
  – Action Items in review by Xcel Energy
Design and Construction: Overview

• Design Kick Off – On Site Meeting between garden operator & designer
  – Establish In Service Date
• Main point of contact will be designer for project specifics
• Detailed Design Timeframe: +/- 16 weeks
  – Operators will receive a detailed design estimate at completion of design
• Metering Equipment ordered 20 weeks from In Service Date
  – 15-week procurement timeline subject to vary depending on equipment
• Construction Timeframe: +/- 12 weeks
Design and Construction: Key Points

• **Key Resource:** [Requirements for Commercial Operation (Design/Construction Process Overview)](Design_and_Construction_Process_Overview)

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**In Service Date (ISD):** A negotiated and agreed-upon date between garden operator and detailed designer for when both parties will have all work complete on site. The date directly influences meter orders and establishment of energization and acceptance test dates.
Design/Construction – Action Items

Minimum **20 weeks** prior to ISD
- 911 Documentation (Address)
  - FastApp
  - Amendment to IA and Standard Contract Regarding Correction in Stated Service Address

Minimum **6 weeks** prior to Energization Date
- Acceptance Testing Procedure
- Insurance Checklist (Fillable PDF, download/upload)
- Insurance Policy

Minimum **10-business days** prior to Energization Date
- “As Built” One-Line Diagram
- “As Built” Site Plan
- Final Electrical Inspection (Form & Photo of Sticker Verification)
- Metering Cut Sheets
- Reservation Letter
- Subscriber Validation (at least 5)
- Standard Contract – e-sign
- MRETS
  - Schedule A e-sign
  - Registration XLSX (template on Developer Resources Page)
- Interconnection Cost Payment (at least 2/3)
- Solar Garden Billing/Mailing Address Change Request Form

**ISD – Energization/Acceptance**

*Late Fee payments are required to be paid prior to receiving PTO*
Design and Construction Reminders

Establishing In-Service Dates (ISD)

• ISD means both Xcel AND Developer will be field completed by that date – if there is no progress within 8 weeks prior to ISD, Xcel may move the ISD to allow other parties to gain energization & acceptance

• ISD is NOT the same as Mechanical Completion

• Mechanical Completion tariff deadline 24-months from:
  - “Expeditied Ready” for Pre-MNDIP / - MN DIA Executed for MNDIP

• During the design stage you will also work with your designer and Xcel Energy’s construction team to negotiate and lock in realistic In-Service Dates, or ISDs. The ISD consists of two separate events which will take place on different days: Energization and Acceptance Testing (also known as Witness Testing). These dates will determine your construction schedule.

• A full detail of the below process can be found on the Developer Resource Page, labelled as the Commercial Operation Process.
911 Address: What is it?

• Local AHJ (Authority Having Jurisdiction) will assign new construction project an address, likely during permitting
• Secure permitting early
• Each garden must have its own address
  – Cannot match land owners, nearby house, or other garden
911 Address: Documentation

• Part 1: Upload Documentation from AHJ

• Part 2: Once this Action is in “Draft”, the Action “FastApp Application” will become available
Fast App: How To

1. Submit FastApp using E911 address
   1. Establishes project in our billing/metering system
   2. Required before meters can be ordered

2. Wait until you receive **FINAL** PDF confirmation, and upload to Action item in Portal:
   1. Status will list “BCL Complete”
   2. (BCL will send a PDF when it is **pending** too)

- Input the **Premise Number** on the SRC page
- Link to FastApp: [FastApp](#)
Fast App: "BCL Complete" Example
Updating Contact Information

To receive **final invoices/checks:**

1. Update the billing/mailing address by completing the [Solar Garden Billing/Mailing Change Request Form (PDF)](#)
2. Send completed form to BSC@xcelenergy.com, SRCMN@xcelenergy.com and upload to the portal

*This is a requirement to achieve PTO*
Design and Construction: Complete

• All Action Items in the portal must be finalized and **approved** by Xcel Energy at least 10 business days prior to Energization

• This will move the Case Status into "Metering and Testing"
Case “Status”

- Pre-Application
  1. Program Approval
  2. Initiate Application
  3. Initial Engineering Screens
  4. Supplemental Review
  5. System Impact Study
  6. Transmission Impact Study (rare)
  7. Facilities Study
  8. Interconnection Agreement
  9. Design and Construction
  10. **Metering and Testing**
  11. Permission to Operate
Metering and Testing

- 8 weeks prior to In Service Date – Operators eligible to request and lock in energization and acceptance test dates
- **Energization**: Xcel Energy provides back feed power to the community solar garden site to allow garden operator testing of their equipment.
- **Acceptance Test**: Garden Operator performs approved acceptance test procedure, which includes three phase and single phase, as well as complete site review and verification.
Metering and Testing

• On the day of your Acceptance Testing, there will be verification by Xcel Energy of the items detailed at xcelenergy.com/HowToInterconnect under Technical Resources, Commissioning

• This list is not comprehensive but touches on each of the primary points.

• Further requirements are detailed in our engineering blue book and further items may be required by local authorities.
Case “Status”

- Pre-Application
  1. Program Approval
  2. Initiate Application
  3. Initial Engineering Screens
  4. Supplemental Review
  5. System Impact Study
  6. Transmission Impact Study (rare)
  7. Facilities Study
  8. Interconnection Agreement
  9. Design and Construction
  10. Metering and Testing
  11. Permission to Operate
Permission to Operate

• In order to achieve Permission to Operate (PTO), garden operators must successfully perform acceptance testing of the solar garden facility and receive site verification approval from the area engineer.

• PTO Letter will be dated on the date of acceptance test if successfully passed and site verification approved
  – If any outstanding items come from acceptance test, garden operators are given 2 weeks to correct and submit verification documentation. Site will be de-energized if any outstanding items still stand beyond the two weeks
  – With outstanding items, PTO Letters will be dated based on the date all verification documentation was submitted to both the Portal and SRCMN@xcelenergy.com to address outstanding items

❖ PTO email will automatically be sent to the Customer email and App Agent email
Permission to Operate

• Final Interconnection (IA) Cost true-up
  – 80 day process from commercial operation date
  – Refund check/invoice sent to address provided in update form
  – 30 days to pay

• Ongoing fees and responsibilities
  – Any charges for house power billed separately
  – $500 per SRC annual program fee
  – Annual Report Submittal

*Commercial Operation Date (COD): the 1st of the month following the Permission to Operate (PTO) date. *Example, a site achieves Permission to Operate (PTO) on 1/17/19, the COD date will be 2/1/2019.
Permission to Operate: Ongoing Fees and Responsibilities

• $300 per SRC **annual fee** for continued maintenance of your SRC application. This will be required each year after a solar garden achieves PTO and be charged to the operator on their February statement.

• Once your garden is live, you will also be responsible each year for providing an **Annual Report** to Xcel Energy and all of your subscribers. Details on what is required for this report can be found in the Section 9 tariff and on the Developer Resource web page.

• Two meters:
  – During the course of solar garden operation, Garden Operators will be charged on their Xcel Energy account for the **house-power** their site consumes, as metering and other systems should be powered independently of the actual production from the site. Your bill credits will still be for gross production from your site and the charges will be separate.
  – **Telemetry** charges may also apply for the maintenance and operation of meters at your site(s). These amounts may vary on a site-by-site basis and will be charged monthly.

• Single Meter Solution:
  – House-power will not be billed separately
Permission to Operate: Final Interconnection Cost True-Up

• 80 days after your first day of subscribed allocation (the first day of the first full month after receiving PTO), you will be sent either a refund check or invoice for the difference in cost between what you have paid for interconnection (based on the Interconnection Cost Estimate) and actual accrued costs. This amount and details on the final costs will also be posted to the SRC portal. You will be responsible for paying any additional cost amount within 30 days of receiving that invoice.

  – If your site is withdrawn from the process at any time after paying your Interconnection Cost Estimate, the true up will take place in a similar time frame, though 80 days after withdrawing your application in the portal.
PTO: Final Interconnection Cost

Final Accounting/Draft

Refund

Payment

PTO/Complete

PTO/Complete
PTO: Late Fee Invoices

- Will remain separate from Final Interconnection Cost true-ups
- Late Fee payments are not e-payments at this time
- Late Fee payments are required to be paid in full prior to receiving PTO
24/7 Access at Active Gardens

• Section 10.2 of Exhibit D (Operating Agreement) to the Interconnection Agreement reads as follows:
  – 10.2. At all times, the Interconnection Customer shall give Xcel Energy access to Xcel Energy’s equipment and facilities located on the Interconnection Customer’s premises. When necessary for Xcel Energy to: perform its obligations under the Generating System Interconnection Agreement (including this Operating Agreement); meet its obligation to operate the Xcel Energy system safely and reliably; to comply with law or regulation; or, provide service to its customers.

• Emergencies, safety, communications
• No communication = No Bill Credits
• Includes plowing!
• All access roads to garden; each production pad within fence
Tariffs

- **Section 9**:  
  - Governs S*RC Specifically

- **Section 10**:  
  - All Distributed Generation  
  - MN DIP
Annual Reports

- Must be submitted annually to all subscribers
- Copy submitted to Xcel Energy for review and uploaded once approved
- Review “Annual Report Template”

- Deadline – March 31 each calendar year following one full production year
  - Example: Site received PTO on any date in 2018
- 2019 annual report will be the first required and must be submitted to all subscribers and Xcel Energy on or prior to March 31, 2020
- Failure to comply may result in disconnection notice
Minneapolis Commerce – E-dockets

• Solar*Rewards Community is filed in Docket 13-867 E-dockets: https://www.edockets.state.mn.us/EFiling/edockets/search.jsp
Minnesota Commerce – E-dockets

- Dockets can be reviewed by adding the docket number to the website
- The Docket is really large, so you can minimize this by searching by Document Type (Orders, Reply, Comments) or on behalf of (Xcel Energy, Department, PUC)
- You can also search by key word (VOS) in the next section of the website
- By using both you will narrow down your search and limit the amount of filings for review
Minnesota Commerce – E-dockets

• You can also sign-up to get notice of filings in the Docket
• Go to →
  – eService Home/Login
  – Register for eFiling
  – Go to Manage Service Lists
Submitting Subscribers

1. Subscriber Agency Agreement
   1. Completed and signed by subscriber
   2. Send to: datarequest@xcelenergy.com
   1. "Community Solar Garden Operator" line on SAA must match "Developer/Owner" field in portal SRC page for that garden
   2. 5-10 business days for approval
Submitting Subscribers

1. Enter into SalesForce
   1. Common Errors
      1. Refer to “Subscriber Portal Error Key” document in Subscriber Management section (under Step 5) of updated Developer Resource Page
   2. Enter subscriber Account/Premise (eliminate any leading zeroes)
   3. Upload SAA

• Subscriber management has been included within the new portal
Bill Credit Timing

• Solar Production recorded in kilowatt hours (kWh)
• Subscriber allocations calculated into bill credit
• Production is posted to subscriber accounts on the 9th of each month

• Timing
  – If billing cycle after the 9th, subscriber will receive credits for the previous month’s production
  – If billing cycle before the 9th, subscriber credits will have a one month lag
  – If billing cycle occurs on the 9th, subscriber credits will vary

• Subscribers can request to have their billing date changed by calling Xcel Energy Customer Service (1-800-895-4999)
Bill Credit Timing Reminders

Monthly Timeline for Bill Credits

- 25th of month - All subscriptions valid (minimum)
- End of month - Allocation snap shot
- 9th of month - Bill Credits Post
- 15th of month - MOR posts

Excess bill credits are only paid out once a year

www.xcelenergy.com/SolarRewardsCommunity
# Sample Subscriber Bill Credits

## Electricity Service Details

- **Premises Number:** 333333333
- **Invoice Number:** 4545454

## Meter Reading Information

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>CURRENT READING</th>
<th>PREVIOUS READING</th>
<th>MEASURED USAGE</th>
<th>BILLED USAGE</th>
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</thead>
<tbody>
<tr>
<td>Total Energy</td>
<td>15539 Actual</td>
<td>15539 Actual</td>
<td>0</td>
<td>15539 kWh</td>
</tr>
<tr>
<td>Off-Peak Energy</td>
<td>687 Actual</td>
<td>687 Actual</td>
<td>0</td>
<td>687 kWh</td>
</tr>
<tr>
<td>On-Peak Energy</td>
<td>14831 Actual</td>
<td>14832 Actual</td>
<td>0</td>
<td>14831 kWh</td>
</tr>
</tbody>
</table>

## Electricity Charges

**Rate:** Limited Off-Pk Svc

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>USAGE UNITS</th>
<th>RATE</th>
<th>CHARGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic Service Chg</td>
<td></td>
<td></td>
<td>$123.92</td>
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<tr>
<td>Off-Peak Energy Chg</td>
<td>2360 kWh</td>
<td>$0.0237/00</td>
<td>$55.93</td>
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<tr>
<td>On-Peak Energy Chg</td>
<td>80 kWh</td>
<td>$0.269/00</td>
<td>$21.52</td>
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<tr>
<td>Fuel Cost Charge</td>
<td>2440 kWh</td>
<td>$0.033918</td>
<td>$81.27</td>
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<tr>
<td>Resource Adjustment</td>
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<tr>
<td>Interim Rate Adj</td>
<td></td>
<td></td>
<td>$5.07</td>
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</table>

**Subtotal:** $192.95

**City Fees:** $5.00

**Total:** $197.95

## Other Recurring Charges Details

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
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<tbody>
<tr>
<td>Solar Microgrid Community Solar Production Credit</td>
<td>$103.80 CR</td>
</tr>
<tr>
<td>Solar Production Period</td>
<td>February 2014</td>
</tr>
<tr>
<td>SRC-00040 Production Credit</td>
<td>4559.3 kWh, 0.00</td>
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</tbody>
</table>

**Total:** $103.80 CR
Subscriber Maintenance

Monthly Reports

– Available for Primary Application Manager & Account Team Members
– Located under “Reports” tab on Developer Portal
### Subscriber Allocation Summary

- Minimum 5 valid subscribers, must be in-compliance 5 business days before the end of the month

<table>
<thead>
<tr>
<th>Premise #</th>
<th>Debtor Number</th>
<th>Solar Garden: Garden Name</th>
<th>Subscriber Name</th>
<th>Allocation (in kW)</th>
<th>Status</th>
<th>Subscriber Agency Agreement</th>
<th>Is Low Income Subscriber</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Solar Garden: Solar Garden ID:</td>
<td></td>
<td>11.700 Valid</td>
<td>Valid Customer</td>
<td>✓</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>15.600 Valid</td>
<td>Valid Customer</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>37.700 Valid</td>
<td>Valid Customer</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>390.000 Valid</td>
<td>Valid Customer</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>150.800 Valid</td>
<td>Valid Customer</td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>
Monthly Owners Report

• P = Production  OU = Owner Unsubscribed
• OS = Owner Subscribed  S = Subscribers Allocation
• *Each valid subscriber will have two line items (standard tariff rate and REC adder)

The Monthly Owners Report is now available in the new portal. Under Reports at the top of the webpage.
Additional Subscriber Information

• Updated Developer Resource Page
  – Sample SAA
  – Subscriber Portal Error Key
  – Subscriber Submission & Requesting Usage

• Bill Credits Section
  – Annual Bill Credit Payouts for Excess Credits
  – Average Monthly Payment (AMP) Customer Info
What's New in 2020
What’s New in 2020

• 2019 VOS Update
  – The 2019 VOS rate remains applicable for applications deemed complete in the early part of 2020 as the new 2020 VOS rate has yet to be approved by our regulators.

• Website & Developer Portal Updates
  – Phase 2 of the portal released 12/9/19, all new Pre-Applications/Applications submitted through this portal
  – Developer Resource page to be updated soon reflecting new portal changes
Thank You!

Thank you for attending the 2020 Solar Developer Training. Still have questions? We are here to help!

Resources:
1. www.xcelenergy.com/SRCResources
2. www.xcelenergy.com/HowToInterconnect
4. SRCMN@xcelenergy.com