

Sample Level 1 Application Form Explanations

This document is meant to accompany the sample Small Generation Interconnection applications. Further information on IREA's generation interconnection requirements and procedures, please visit <https://irea.coop/rates-renewables/generation-interconnections/> within IREA's website. You may also contact Engineering Services:

- (303) 688-3100 x5302 or (800) 332-9540
- EngineeringServices@irea.coop

Components of a complete application:

- I. Application signed by property owner
- II. Site Plan
- III. One-line electrical diagram
- IV. Specification Sheets for the Solar Modules and Inverters, showing UL certifications.
- V. Site Control Documentation (if ownership of generation equipment is by anyone other than the property owner)
- VI. Personal Liability Insurance Documentation
 - a. \$300,000 minimum homeowners insurance
- VII. \$100 Application Processing Fee
 - a. Payable with cash, check, or money order. IREA is unable to accept this fee via credit card

IREA does not need the following:

- Structural prints
- Specification sheets for anything other than the inverter(s) and PV modules
- Roof plans or roof warranty
- Weather data
- Mounting information (Rock-it systems, hardware, nuts, bolts, etc.)

Application Page

Please complete all items of the application page to the best of your ability. Any unmarked cell may result in a return of the application.

DocuSign is an acceptable form of customer signature. Please include the date of signature.

Site Plan

The site plan should give a good description of how the property looks, where all the electrical equipment currently resides, and where the new equipment is proposed to be installed. It should include:

- Utility meter
- Main electrical panel and associated sub-panels
- Details of where the generation system taps into the grid, called the Point of Interconnection (oftentimes within the main service panel)
- Solar Production (REC) Meter
- AC disconnect switch
- Inverter(s)
- PV modules
- Fence / other obstructions
 - The AC disconnect and production meter shall be located within 5' and be reachable from the utility meter, except in cases where there is a meter pedestal or meter pole

One-Line Diagram

The one-line diagram should lay out the entire electrical schematic configuration. It needs to match all of the components of the site plan. It should include:

- Utility meter
- Main electrical panel and associated sub-panels
- Details of where the generation system taps into the grid, called the Point of Interconnection (oftentimes within the main service panel)
- Solar Production (REC) Meter
- AC disconnect switch
- Inverter(s)
- PV modules

The diagram needs to detail how each device is connected.

- Breaker sizes within electrical panels
- Line vs. load in production meter (PM)
 - IREA requires the line side of the PM to be fed from the generation
 - IREA requires the load side of the PM to go to the utility

Many one-line diagrams contain wire sizes, voltages, amperages, power consumption/production, etc. While this information is useful, do not convolute the diagram by feeling the need to provide all electrical data.

Specification Sheets for Inverter(s) and PV Modules

Specification sheets for the inverters and PV modules need to be included in the application packet. These spec sheets need to match the devices called out in the one-line and site diagrams. The inverter specifications need to include:

- Inverter
 - UL 1741 listing
 - IEEE 1547 listing
 - Output AC power
- PV modules
 - Output DC power
 - UL 1703 listing

Personal Liability Insurance

Proof of insurance must be provided by the interconnection customer that shows personal liability coverage with a combined single limit for bodily injury and property damage of not less than \$300,000 for each occurrence.

Application Fee

Applications will not be entered into IREA's queue without receipt of \$100. This fee is payable with cash, check, or money order. We are unable to accept this payment via credit card or over the phone.