



## City of Warrenville Photovoltaic Installation Plan Review Checklist

Building permits for a typical rooftop photovoltaic (PV) array system are generally issued within one week after the required permit application materials are submitted to the Community Development Department. Systems not mounted on a roof may take a few extra days for zoning review. In order to process your permit application in an expeditious manner you must provide all the required information regarding your proposal. Incomplete applications will delay the review process. All design and construction must comply with the *2015 International Solar Energy Provisions*<sup>TM</sup>. If you have questions please contact us using the information provided at the end of this plan review checklist.

### The following information will be required for all solar construction permits:

1. A completed City of Warrenville [permit application](#)
2. A standard electrical diagram to accurately represent the PV system. Acceptable diagrams, in interactive PDF format, are available at [www.solarabc.org/permitting](http://www.solarabc.org/permitting). If the electrical system is more complex than the standard electrical diagram can effectively communicate, provide an alternative diagram with appropriate detail.
3. The installing contractor name. Note: all electricians must be registered in Warrenville, application for [Warrenville electrical registration](#) is available here or on our website.

### Using the Solar ABCs application form for the most applicable type of PV system and the City of Warrenville Building Permit Application please assure the following information is included:

- Structural Review of PV Array Mounting System worksheet:
  - Engineer structure calculations of structure to which the installation will be attached
  - Information about the mounting system that will be used to support the array
- A site plan drawn to-scale showing:
  - The location of the proposed equipment installation
  - Maximum height of array system and distances to lot lines and roof edges
  - Types of panels and inverters
  - Types and sizes of conduits and conductors
  - Lengths of cable runs
  - A grounding diagram showing electrodes and grounding electrode conductors
- A wiring diagram showing:
  - Equipment
  - All circuitry
  - Fusing
  - Points of connection
  - Disconnects
  - Array wiring
  - Equipment grounding
- Cut sheets and instruction manual for the inverter with the applicable model numbers highlighted and the UL or comparable listing noted.
- Cut sheets for the PV modules, which need to include  $V_{OC}$  rating,  $I_{SC}$  rating,  $P_{MAX}$ , maximum series fuse rating, voltage at  $P_{MAX}$  and current at  $P_{MAX}$ .
- Identify wire types and connectors of all cables.

- Provide details for array mounting and engineering for the supporting structure.
- Verify the ability of PV systems installed on three phase supplied systems to cease to export power on loss of voltage in any phase.
- Show all warning signs and their locations.
- If a battery storage is proposed in the design, provide cut sheets and connection diagrams for battery storage system and Identify:
  - Battery fusing and fuse holders
  - Amp hour of battery bank
  - Charge capacity of charge system
  - Details for battery storage and venting

**Ensure that all required materials have been completed and compiled and submit them to:**

In person or U.S. Postal: 3S258 Manning Avenue, Warrenville, IL 60555

**For answers to questions please visit [Warrenville: Plugging into Solar Power Webpage](#) , or contact Dale Engebretson at 630-260-3026**

**An application fee of \$79.50 will be required upon approval of permit. (please do not submit payment prior to permit approval)**