

# ALTERNATIVE ENERGY SYSTEMS

Along with the permit application, Please provide a basic single line drawing for the proposed alternative energy system along with product information for each piece of equipment to be installed. Once received, the information will be reviewed for compliance with the 2013 Residential Code of Ohio (RCO) and the 2011 National Electrical Code (NEC).

Basic single line drawing should include:

1. Equipment to be installed.  
(Power Source, Disconnects, Overcurrent Protection, Inverter, Charge Controller, Batteries, Distribution Panel(s), etc.)
2. Wiring methods used.  
(Conduit material size and type, Cable material size and type)
3. System Grounding.  
(Electrode(s), Conductor material size and type)

Product information should include:

1. Manufacturer contact information
2. Product specifications

All electrical equipment utilizing or conducting dc voltage/current must be rated/listed for the dc voltage/current being applied.

Systems utilizing battery storage must provide ventilation according to the manufactures recommendations for the area of the home where the batteries are kept.

Residential branch circuit overcurrent protection, wiring methods, and devises are to comply with the applicable provisions of the 2011 NEC

Refer to the following NEC articles for more information:

- |     |  |
|-----|--|
| 445 | Generators                                       |
| 480 | Storage Batteries                                |
| 690 | Solar Photovoltaic Systems                       |
| 694 | Small Wind Electric Systems                      |
| 705 | Interconnected Electric Power Production Sources |

Revised 1/29/14

# Alternative Energy, Stand-Alone Electrical System Single Line Diagram

Site Address \_\_\_\_\_

## Instructions (Updated 5/9/16)

- Complete single-line drawing for the system to be installed.
- Place an "X" through any equipment not to be used. Re-route and label circuit connections as needed to reflect your installation
- Add any equipment not shown that will be installed. Provide additional pages if needed.
- To better help us understand your project, please provide any additional information you think would be helpful.

## System Grounding

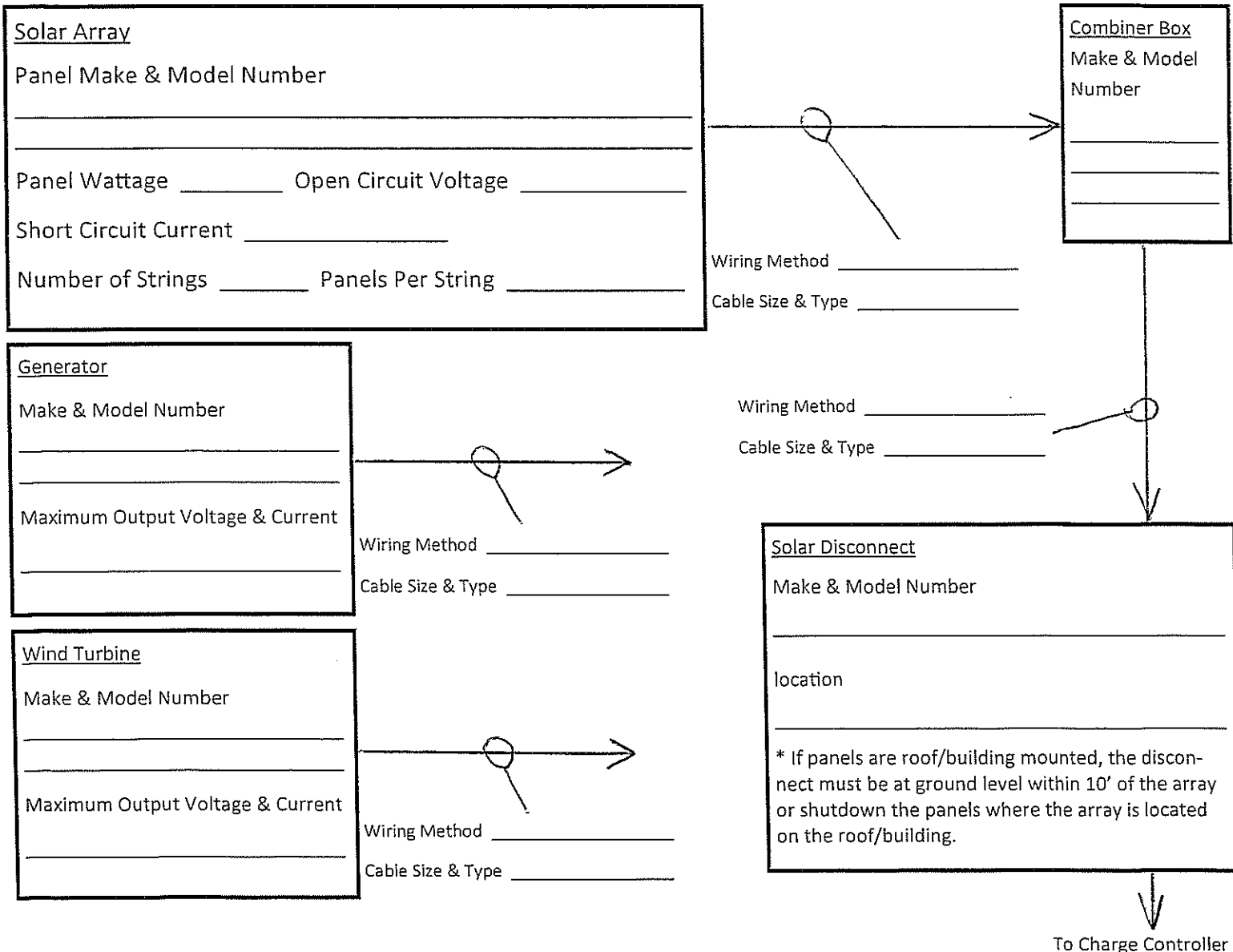
Location of Bonding Jumper \_\_\_\_\_

Location of Ground Fault Protection Device \_\_\_\_\_

Ground electrode system to be installed \_\_\_\_\_

Ground electrode conductor size and type \_\_\_\_\_

## Alternative Energy System Components—Electrical Power Sources



# Alternative Energy System Components—Electrical Power Inversion, Storage & Distribution

Site Address \_\_\_\_\_

