

Permit # [For Jurisdiction Use]: \_\_\_\_\_

## CT Standardized Solar PV Permit Application Supplement

Please fill in the following information and submit ALL applicable attachments.

Date: \_\_\_\_\_

General Description of Solar PV Array: \_\_\_\_\_

System Size (kW DC): \_\_\_\_\_

### Solar PV Mounting Information

Mounting Type (roof, pole, ground, other-specify): \_\_\_\_\_

Mounting System Manufacturer: \_\_\_\_\_

Product Name and Model #: \_\_\_\_\_

### Building Information (For Roof-Mounted Systems Only)

Building Type (e.g. house, shed, barn, slab): \_\_\_\_\_

Building Height (in feet): \_\_\_\_\_

Is the building permitted?  Yes  No  NA

If no, reason: \_\_\_\_\_

### Electrical Description

Size (amps) and type (phase, voltage) of electrical service: \_\_\_\_\_

Amperage of main breaker: \_\_\_\_\_ Will the value of main breaker change?  Yes  No To: \_\_\_\_\_

Rated amperage of the bus bar in the main panel: \_\_\_\_\_

Type of interconnection (e.g. breaker-load side, supply-side interconnect): \_\_\_\_\_

Electrical panel location: \_\_\_\_\_

If load side interconnect, will solar intertie into a subpanel?  Yes  No

If yes, rated amperage of the subpanel bus bar? \_\_\_\_\_ Value of breaker protecting subpanel bus bar? \_\_\_\_\_

**Attachments for application** (See instructions on the next page. Example Attachments are available for download at [www.energizect.com/sunrisene](http://www.energizect.com/sunrisene))

- 1. Additional Subcontractors and Information
- 2. One-Line Electrical Drawing
- 3. One-Line Site Plan Drawing
- 4. Attachment Details (Line Drawing)\*
- 5. Solar PV Module Specification Sheets From Manufacturer
- 6. Inverter Specification Sheets From Manufacturer
- 7. Pole or Ground Mount Information (if applicable)\*
- 8. Structural Review Worksheet (if applicable)
- 9. Additional Information for Large Solar PV Systems (as Specified by the Municipality)

**\*NOTE:** Applicants should submit either Attachment 4 for roof-mounted systems OR Attachment 7 for pole/ground-mounted systems, not both.

## Instructions for ATTACHMENTS to the Connecticut Standardized Solar PV Permit Application

Please Complete the Application Form (pages 1-2) and provide ALL applicable Attachments based on the below instructions and examples for Attachments 2-7. Attachment 8 is a Structural Review Worksheet to be used if applicable, provided as a separate form. Additional information required by a municipality for large solar PV systems can be submitted as a 9<sup>th</sup> Attachment.

### **Each Attachment—Subcontractor List, Drawings and Calculations—Must Include:**

- Date
- Property Owner
  - Name
  - Address
  - Contact phone number
- Installation Company
  - Name of company and contact person
  - Address
  - Contact phone number
- Drawing number and Revision number or other control method
- Drawing designer

### **Attachment 1. Additional Subcontractor List** (If Needed, as per Permit Application)

### **Attachment 2. One-Line Electrical Drawing Must Show:**

- Size of electrical service
  - Size of Main Breaker
  - Size of Bus Bar (If Known)
- Type of electrical service
- If interconnection point is a subpanel
  - Size of Subpanel Main Breaker
  - Size of Subpanel Bus Bar (If Known)
- Nominal power of solar system (Watts)
  - DC Capacity: Nameplate "STC" Value of all panels, watts
  - AC Capacity: Total AC capacity of Inverters, watts
- Batteries (If Present): Type, Quantity, Nominal Voltage, Capacity kWh
  - H<sub>2</sub> mitigation methods (If Necessary)

### **(Attachment 2 continued)**

- Interconnection method
  - Size of overcurrent protection
- Number, type and electrical configuration of solar panels
- Number and type of Inverters
- Values for source stickers: NEC 690.53; NEC 690.54 (Encouraged, Not Required)
- Wiring methods
  - Wire Type(s), Size
  - Conduit Type(s), Size
- Solar metering (If Appropriate)
- Electrical current contribution from all PV sources
- Electrical grounding details: Wire Type, Size, GEC

### **Attachment 3. One-Line Site Plan Drawing Must Show:**

- Location of solar panels
- Location of Inverters and major equipment
- Location of roof obstructions (Vents, Chimneys, etc.)
- Location of Main Breaker Panel
- Location of Utility Meter
- Location of AC disconnect
- Location of batteries and/or charge controllers (If Appropriate)
- Location of solar metering (If Appropriate)
- Planned conduit path (Encouraged, Not Required)
- Gross dimensions of structure (If Appropriate)
- Approximate layout of building or other structure (If Appropriate)
- Property lines, zoning, and setback considerations (If Appropriate)
- Trenching details: Location, Depth and Length of Trench (If Appropriate)
- A notation indicating scale —or not to scale (Both are Acceptable)

## Instructions for ATTACHMENTS to the Connecticut Standardized Solar PV Permit Application

### Attachment 4. Attachment Details for Roof-Mounted Systems (Line Drawing) Must Show:\*

- Racking System
  - Manufacturer of racking structure
  - Model
  - Type
- Flashing description
- Fastener detail
  - Type of fasteners, e.g. Lag Screws, Seam Clamps, Ballast
    - If Lag Screws include:
      - (1) Type (e.g. Zinc, Stainless steel)
      - (2) Size of Lag
      - (3) Depth of Thread Penetration
      - (4) Type of Sealant (e.g. caulk)
- Mitigation of Dissimilar Metals
  - Describe how any dissimilar metals will be isolated

### Attachment 5. Solar PV Module Specification Sheets (provide PDF from manufacturer)

### Attachment 6. Inverter Specification Sheets (provide PDF from manufacturer)

### Attachment 7. Pole Mount or Ground Mount Information (if applicable):\*

- Racking system
- Mounting specification sheets and details from manufacturer (PDFs)
- Manufacturer's Pre-Engineered Document or PE Stamp
- Code Compliance Manual (If Requested by Municipality)
- One-way distance from the Solar PV system to the interconnection point
- Electrical grounding details
- Height of solar PV system at maximum design tilt
- Applicable zoning information if not shown on site plan (e.g. setback from property line)

\***NOTE:** Applicants should submit either Attachment 4 for roof-mounted systems OR Attachment 7 for pole/ground-mounted systems, not both.

### Attachment 8. Structural Review Worksheet (if applicable, see separate form)

- **NOTE:** This worksheet can be used by an installer to meet the requirements of a municipal building department if the department specifically authorizes its use for that purpose. It may also be used to supplement a structural review certification letter from a Professional Engineer, or for independent project purposes.

### Attachment 9. Additional information required for larger solar PV systems

- This Standardized Solar PV Permit Application can also be used to permit larger systems. If your municipality requires additional information to permit larger systems, specify the information needed as a 9<sup>th</sup> attachment to the application.