

PAGE 1 OF 3

### 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?
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?
<b>Attachments for application</b> (See instructions on the next page. Example Attachments are available for download at <a href="www.energizect.com/sunrisene">www.energizect.com/sunrisene</a> )
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 <u>OR</u> Attachment 7 for pole/ground-mounted systems, not both.



PAGE 2 OF 3

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

Please Complete the Application Form (pages 1-2) and provide ALL <u>applicable</u> 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.

## <u>Each</u> 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)



PAGE 3 OF 3

# 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)

## 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.

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