

# City of Santa Clarita Building & Safety

# Solar Photovoltaic (PV) Submittal & Inspection Requirements

PV systems constructed in the City of Santa Clarita require a building permit issued by Building & Safety and one or more inspections by a city Building Inspector. This publication explains the permit and inspection process for PV systems.

## **Building Permit Process for PV Systems**

- Please visit the City's Permit Center located at 23920 Valencia Blvd., Suite 140, Valencia, CA 91355.
- Flat-mounted rooftop PV systems under 10 KW and installed on one- or two-family residences are exempt from City Planning approval. All other PV systems must be approved by City Planning prior to submittal to Building & Safety
- An electrical permit (ELE) is required for the installation of stand-alone PV projects.
- A building permit (BLD) is required for the installation of ground-mounted PV systems, ballasted systems, and/or when a PV project is being permitted in conjunction with an additional construction, such as a new building, addition, plumbing, or mechanical work.
- A main electrical service panel upgrade requires a separate electrical permit.

### **Plan Review Requirements for PV Systems**

Building & Safety reviews the plans and calculations for all PV projects to verify the systems are in compliance with State Building Codes and local regulations. In order to obtain a building permit, the following documents must be provided:

- A completed permit application
- Two copies of the plans on 11"x17" sheets minimum. Larger sheet sizes may be required for commercial and multi-family projects. When required, plans prepared by a licensed professional shall be sealed and signed. Please see "Plan Requirements for PV Systems" on page 2.
- One copy of manufacturer's specifications for the proposed PV system modules, inverter(s) and all other components including the mounting system.
- A completed Solar Worksheet that can be obtained from Building and Safety counter or online at <a href="http://www.santa-clarita.com/Building">http://www.santa-clarita.com/Building</a>

#### **Plan Review Period**

Building & Safety strives to complete plan reviews as soon as possible. The turn-around time for PV system plan review is as follows:

- 2-3 business days for flat-mounted PV systems under 10 KW and installed on one- or two-family residences.
- 15 business days for other PV systems.

#### Inspection

Building & Safety offers next business day building inspection for requests made before to 2:30 PM the day prior. PV systems under 10 KW are inspected after the installation is complete. PV systems over 10 KW require rough electrical inspection. Inspections can be scheduled by calling (661) 286-4097 or online at http://www.santa-clarita.com.

#### **Contact Information**

- For questions regarding the PV permit process call (661) 255-4935 or e-mail buildingpermits@santa-clarita.com.
- For Electrical Code questions regarding PV systems please contact Henry Pio at (661) 255-4951

# City of Santa Clarita Building & Safety Solar Photovoltaic (PV) Submittal & Inspection Requirements (continued)

### **Plan Requirements for PV Systems**

**Site Plan:** Provide a site plan site which includes the site address, parcel number, property owner's name, and legal description. For roof-mounted PV systems, show the location of the building on the site plan. For ground-mounted PV systems, show the showing property lines and any slopes, and include the setback dimensions. Slope setbacks are measured from the bottom of the footing horizontally to daylight.

**Roof Plan:** Provide a roof plan showing the slope of the roof and the proposed PV panels in relation to any ridge, hip, or valley. Show the existing PV panels (if any) and clearly label them on the plan.

**Fire Department Access:** A minimum 3 ft wide clearance shall be provided around the roof perimeter and/or between PV arrays for access by Fire Dept. personnel.

**Single Line Diagram:** Provide an electrical single line diagram showing the number of PV panels (including the manufacturer and model number) with voltage and kilowatt output, all disconnects, all combiners, all inverters (including the manufacturer and model number) with the input rating of any subpanels connected to the PV system, the ampere ratings of the meter panel bussing, the main service disconnect, and the PV circuit breaker, the size and type of all raceways, and the size of all conductors.

**Manufacturer's Electrical Data Information:** One copy of manufacturer's specification data sheets (cut sheets) for the proposed PV modules, inverter(s), and meter shall be provided with the submittal.

**Equipment Listing Requirement:** All devices and components of a solar photovoltaic system must be listed by a nationally recognized agency, such as UL. Rooftop solar photovoltaic modules shall meet the minimum fire classification of the roof assembly in accordance to California Building Code (CBC) Chapter 15 and City of Santa Clarita amendments.

Roof Mounting Information: The structural stability of the PV system shall be detailed on the plans. Specify the maximum weight of each PV panel and provide complete structural details for the PV system and its connections to the structure (specify the type, size, spacing, embedment, weather protection, etc.). Provide a cross section showing the height of the proposed PV panels above the roof, the supporting structure and the distance down the slope from any roof ridge. If using a pre-manufactured racking system, provide the manufacturer's installation specifications. If alteration of the existing structure is proposed, structural plans and calculations will be required. Ground-mounted PV systems shall include complete structural drawings of the supporting structure. Ballasted systems will require structural analysis of the existing structure for vertical and lateral loads (seismic loads). Additionally, structural justification for the wind uplift will also be required.

**Design Professional Stamp and Signature:** All plans must be stamped and signed by the responsible licensed professional in accordance with the California Business and Professions Code. PV plans may be signed by a California licensed Electrical Engineer (P.E.), a licensed Electrical Contractor (C-10), or a licensed Solar Contractor (C-46) who is responsible for the PV system installation. A California registered Architect, Civil Engineer, or Structural Engineer shall stamp and sign the structural plans and calculations, when required.

**Plan revisions:** Plan revisions initiated by the builder, owner or Building Inspector's correction require approval by a Building & Safety plan reviewer. Plan reviewers are available Monday through Thursday between 7:30 and 11:00 AM.