City of Santa Barbara
Building & Safety Division

Community Development
630 Garden Street
805-564-5485

Photo Voltaic System Requirements for AB 2188 Expedited Review

The following criteria are intended for an expedited solar permitting process. If the proposed installation does not meet the following requirements, it must go through the standard review process.

General requirements:

- The system is 10 kW AC rating or less.
- The solar array is roof-mounted on a one- or two-family dwelling or accessory structure.
- The solar/panel/module arrays are not more than 10" above the roof surface, measured at right angles to the roof surface.
- The system is utility interactive and does not utilize battery storage.
- An electrical service change or upgrade is not being performed under the same permit application.

Plan requirements:

- Plans must be complete, accurate and drawn to scale.
- The minimum paper size is 18" x 24" and the maximum paper size is 36" x 42". (A maximum of (2) 8.5" x 11" sheets may be used if all information can be provided.)
- Provide three complete sets of plans with numbered pages and a sheet index (if needed).
- Electronic plan submittals may be sent to CDBuildingCode@SantaBarbaraCA.gov

Information required on the plans:

- The first sheet of the plans must contain the following:
  - ❑ Name, address and phone number of owner, engineer, architect or designer as appropriate
  - ❑ Address of proposed project with assessor's parcel number and land use zone
  - ❑ A complete description of the scope of work as follows: *"Install (x) kW solar photovoltaic system including solar array and (x) inverters mounted on (BUILDING NAME) as a supplemental electrical supply system connected to the utility supply through the service equipment."*
- A complete site plan showing the following:
  - ❑ All property lines and easements, include north arrow.
  - ❑ Existing structures with distances in between and from property lines (include patio covers, decks, trellises, pools, etc.)
  - ❑ Location of all proposed work
  - ❑ Distance between maximum height of proposed work and structure it is mounted on.
- Include plan details showing all structural elements including roof framing members affected (e.g., spacing and spans of roof joists), connectors and, if applicable, engineering calculations and design.
- Fire Safety Requirements:
  - ❑ Clear access pathways provided
  - ❑ Fire classification solar system is provided
  - ❑ All required markings and labels are provided
  - ❑ A diagram of the roof layout of all panels, modules, clear access pathways and approximate locations of electrical disconnecting means and roof access points

- Electrical Requirements:

- ❑ No more than four photovoltaic module strings are connected to each Maximum Power Point Tracking (MPPT) input where source circuit fusing is included in the inverter

    - No more than two strings per MPPT input where source fusing is not included
    - Fuses (if needed) are rated to the series fuse rating of the PV module
    - No more than one non-inverter-integrated DC combiner is utilized per inverter

- ❑ For central inverter systems: No more than two inverters are utilized
- ❑ The PV system is interconnected to a single-phase AC service panel of nominal 120/240 Volts AC with a bus bar rating of 225 Amps or less
- ❑ The PV system is connected to the load side of the utility distribution equipment
- ❑ An electrical plan showing the following:
    - Location of main service or utility disconnect
    - Total number of modules, number of modules per string and the total number of strings
    - Make and model of inverter(s) and/or combiner box if used
    - Equipment cut sheets including inverters, modules, AC and DC disconnects and combiners
    - Labeling of equipment as required by CEC, Sections 690 and 705
    - Specify grounding/bonding, conductor type and size, conduit type and size and number of conductors in each section of conduit
    - One-line diagram of system

Information Required on Electrical One-line Diagram:

Equipment Information:
Main distribution / service – New or existing; busbar amps; Main OCPD amps; Interconnect OCPD amps
Inverter / Microinverter – Make and model; Max input DC volts; Nominal AC output amps; quantity
PV Meter (if used) - Make and model; voltage and amperage rating
AC and DC disconnects – location(s); voltage and amperage rating
Junction / Combiner Box – Make and model; NEMA rating
Modules - Make and model; quantity; voltage, wattage, fusing; quantity

Circuit Information:
Conduit – size and type
Circuit Wiring - In raceway or exposed; conductor size and type; temperature derating adjustments

Grounding Information:
Building Grounding Electrode – New or existing; size & length; conductor size and connection method
Equipment Grounding Conductor – In raceway or exposed; conductor size and type; AC or DC