This information bulletin explains the permit process and fees for Solar Photovoltaic Systems (PV). It also provides information about submittal requirements, plan reviews, and project inspections.

I. APPROVAL REQUIREMENTS
An electrical permit is required for the installation of all PV systems. A building permit or combination permit for installations on single family dwellings or duplex projects, may be required if structural modifications to existing construction are proposed to support the PV system; and will be required for all new structures such as trellises, patio covers, canopies, platforms etc. that support PV systems when such structures would otherwise be exempt from a building permit per Municipal Code Section §129.0203.

PV systems shall comply with all applicable requirements, City ordinances and regulations including zoning, structure height, FAA notification and condition of prior development permits governing the site.

II. SUBMITTAL REQUIREMENTS
The following plans and documents shall be provided along with the appropriate fees.

A. Application Package
Provide one copy of the General Application (DS-3032).

B. Plans
1. Residential installations per Plan Template
The template was developed to guide you in preparing residential solar PV plans. This template shall be used only for a residential PV project when installed on a sloped roof with the panel weight of five pounds per square foot or less. This plan template may be used as a general guideline to prepare residential solar PV plans. Provide the following items at your appointment:
   a. Two copies of the plans per Solar Photovoltaic Plan Template. The plan template sheets shall be modified to reflect the actual project-specific details.
   b. One copy of manufacturer’s specifications for the proposed PV panels with all electrical information.
   c. One copy of manufacturer’s specifications for the proposed PV inverter(s) showing all electrical information.

2. All Other Plans
Commercial installations and residential installation where the Residential Plan Template cannot be used; provide two sets of each of the following plans and documents:

a. Site Plan
The site plan for ground mounted PV system must show property lines and setback dimensions. For roof mounted PV systems, provide a site plan with the property lines showing the footprint of the building and the location of the PV system on the building or structure.

Provide a detailed roof plan showing the slope of the roof and location of the array on the roof in relation to any ridge, hip or valley. The plans must also include the site address, legal description, assessor’s parcel number, and property owner’s name/address. See Information Bulletin 122 for a sample site plan.

Include a plan showing the location of all existing and proposed PV panels, AC or DC combiners, all disconnects inverters sub-panels connected to the solar PV system and the meter panel.

b. Single Line Diagram
An electrical one-line diagram showing the number of photovoltaic panels (include the manufacturer model number) with voltage and kilowatt output, all disconnects, all combiners, all inverters (include the manufacturer model number)
with input ratings, the ampere rating of any sub-panels connected to the PV system, the ampere rating of the meter panel bussing, the ampere rating of the main service disconnect, the ampere rating of the PV circuit breaker, size and type of all raceways and the size and type of all conductors.

c. Framing Plan
Roof mounted solar projects shall include a framing plan showing the supporting structure and the attachment of the panels to the structure of the roof. If using pre-manufactured racking systems, provide the manufacturer’s installation specifications.

Provide a cross-section showing the height of the proposed PV panel above the roof, the supporting structure and the distance down the slope from any roof ridge.

Where alterations are required to existing structures to support and provide attachment for PV systems, structural plans shall be provided that are sufficient in detail and scope to demonstrate the required load path to the ground.

Ground mounted arrays shall include a framing plan showing the supporting structure and the attachment of the panels to the structure and must include details that are sufficient in detail and scope to show the load path to the ground.

d. Manufacturer’s Electrical Data Sheets
Include one copy of the manufacturer’s specifications for the proposed PV modules, inverter(s) and meter with all of their electrical information.

e. Signature on Plans
All plans shall be signed and stamped in accordance with the California Business and Professions Code. PV Plans may be signed and stamped by a registered electrical engineer or a licensed electrical contractor (C-10 License) or a solar contractor (C-46 License) who is responsible for the installation of the system. A general contractor (B-License) may also sign the plans only if the PV Panels are installed in a new building or new addition area. A registered architect, civil engineer or structural engineer shall sign and stamp structural plans and calculations when required.

III. OTHER REQUIREMENTS
A. Structural Plan Review
A structural review and structural calculations for roof-mounted installations will be required for the following cases:
1. Where alterations to the structure are required to support and provide an attachment for PV systems;
2. PV array exceeds five pounds per square foot;
3. Any piece of equipment weighing more than 400 pounds;
4. Mounting height above the roof is greater than 30 inches;
5. The array is mounted with a ballasted system or a ground mounted PV systems located more than five ft. above the ground.

B. Hazardous Materials Review
All Solar Photovoltaic systems with batteries shall be reviewed for hazardous materials. Include with the application a completed Hazardous Materials Reporting form, DS-165.

C. Historical Review
1. Applicants proposing to install or modify a photovoltaic system on a premise containing a designated historical resource or within a historic district are encouraged to meet with Historical Resources staff prior to submittal of the project to the Development Services Department. Historical Resources staff will work with the applicant to reduce, to the extent possible, any adverse impact to the historical property through project design and location. Historical Resources staff will then stamp the plans as conforming to the San Diego Municipal Code and will recommend application of the State Historic Building Code. There is no charge for this meeting and review of photovoltaic projects by Historical Resources staff.
2. Please contact HR staff at Historical Resources@sandiego.gov or 619-235-5224 if you would like to arrange for a meeting.

IV. OPTIONS FOR REVIEW PROCESS
A. Commercial or Multi-Family Buildings, Ground Mounted or PV Systems with Battery Back-up
Plans for Solar Photovoltaic Systems on commercial or multifamily buildings, including PV projects with batteries, and all ground mounted PV projects must be submitted for review. Plans shall be submitted on the third floor of the Development Services Center at 1222 First Ave. Appointments to submit applications and plans is highly recommended, and can be scheduled by calling (619) 446-5300.
B. Single-Family Residential Roof Mounted PV Systems

Projects prepared in accordance with the City's Residential PV Plan Template may be processed for permitting by appointment at the Inspection Services Office located at 9601 Ridgehaven Ct. Suite 220.

Appointments can be scheduled by calling (619) 446-5300. Customers will leave their completed application package for set up and review. Completed plans will be ready for pick-up within two business days. Plan re-checks will require customers to coordinate review with the Plan Reviewer.

C. Professional Certification Program

This program allows eligible design professionals to obtain a permit for Solar PV installations with limited plan review. Refer to Information Bulletin 303 for additional information.

D. Express Plan Check Fee

When available, a reduced review period can be accomplished by paying an Express Plan Check fee at 1.5 times the regular plan check fee.

V. FEES

A. Residential Submitted

Issuance/with Plans...........................................$39
Travel-documentation.................................$50
Records Fee.............................................$20
First System/Inverter Plan Check....................$174
First System/Inverter Inspection.....................$174

B. Residential Per City of San Diego Residential PV Plan Template

Issuance/with Plans...........................................$39
Travel-documentation.................................$50
Records Fee.............................................$20
First System/Inverter Plan Check....................$111
First System/Inverter Inspection.....................$174

C. Professional Certification Program

Issuance/with Plans...........................................$39
Travel-documentation.................................$50
Records Fee.............................................$20
First System/Inverter Inspection.....................$174

D. Commercial

Issuance/with Plans...........................................$137
Travel-documentation.................................$50
Records Fee.............................................$60
First 100 Kw Plan Check...............................$334
Each Additional 100 Kw Plan Check.................$116
First 100 Kw Inspection...............................$261
Each Additional 100 Kw Inspection..................$101

If a building or combination permit or additional reviews such as structural reviews are required, additional plan review fees or permit fees may be required and will be charged based on an hourly rate (see Information Bulletin 501).

VII. INSPECTIONS

Required inspections may include: Electrical Underground; Electrical Rough; Electrical Final; Structural-Foundation; Structural-Rough and Structural-Final.

After receiving final inspection approval for all related City of San Diego Approvals (permits), SDG&E will be notified. The system is not approved to energize until SDG&E approval is obtained.