PSI APPLICATION INSTRUCTIONS (PRE-POWERCLERK)

Process Summary

Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8	Step 9	Step 10
Find	Size	Mail		Building			Submit Claim	_	
Installer	System	Application	Reservation	Permit	System	Inspections		Operate	Che

STEP 1 – FIND AN INSTALLER

Except for those systems that are self-installed, all systems must be installed by appropriately licensed California contractors in accordance with rules and regulations adopted by the State of California Contractors State Licensing Board (CSLB). Solar installation contractors must have an A, B, C-10 or a C-46 license for photovoltaic (PV) systems.

PWP strongly suggests hiring an experienced licensed solar contractor to design and install solar systems. Licensed and experienced contractors are the key to getting the most productive solar energy system possible and avoiding generation production in the future.

Solar energy systems must be designed and installed in conformance with the manufacturer's specifications and with all applicable electrical and building codes and standards.

Typically, the solar installer will apply for PSI incentives on the customer's behalf, apply for local permits, and arrange for the solar system to be interconnected to the utility power grid. Installers must be familiar with PWP's rules and regulations for electrical design and installation (Regulation 21) and Distributed Generation Interconnection Requirements (Regulation 23) including metering requirements.

The State of California provides a list of pre-qualified solar installers online at http://www.gosolarcalifornia.org/database/search-new.php. Searching for a solar installer by zip code is the fastest way to find a solar installer closest to you, although any licensed contractor may work on your project. Solar installers typically provide free site evaluations, comprehensive quotes and payback information.

PWP recommends evaluating at least three (3) different contractors and consider doing the following:

- 1. Check the status of Contractor License at www.cslb.ca.gov. License must be an active A, B, C-10, or C-46 in order to meet the eligibility requirements for the PSI Program.
- 2. Check references. One of the most reliable sources for business references is the Better Business Bureau (BBB)
- 3. Examine customer feedback. Conduct internet searches, talk to those who may have used this contractor, etc. in an effort to find out as much information as possible.
- 4. Compare quotes to actual project costs listed in weekly data sets from the California Solar Initiative. Download here.

While PWP does not certify or recommend PV equipment manufacturers or installers, these internet resources may help you locate potential PV installers:

- Go Solar California
- Solar Estimate
- Cooler Planet
- California Solar Energy Industries Association

FOR SELF-INSTALLATIONS, PLEASE CALL THE CUSTOMER PROGRAMS HOTLINE AT (626) 744-6970

STEP 2 - DETERMINE ENERGY NEEDS AND APPROPRIATE SIZE OF SOLAR SYSTEM

Making your home or business energy efficient before you install solar energy is essential to making your system as economical and efficient as possible. Energy-saving actions—such as changing incandescent bulbs to compact fluorescent lamps (CFLs), and replacing old, inefficient appliances—are the best way to save energy and money while providing real, lasting benefits to the environment.

Energy efficiency measures also help reduce the size of the solar system you need, saving you thousands of dollars in up-front installation costs. Speak to your installer to determine what kind and size of solar power system is right for you. Be sure to consider any potential reductions in your energy usage that may result from the required energy audit.

Residential customers can fulfill this requirement by providing proof of completing the Home Energy Calculator.

STEP 3 – MAIL PSI APPLICATION REQUEST FORM AND REQUIRED DOCUMENTS TO PWP

Note: This step includes all forms necessary to apply for a **PSI rebate** and **interconnection** with the PWP electric system.

Include in your application package:

- a. **PSI Application Request Form** signed by both the installer and customer (Note: You can fill in this form at your computer desktop, save it and print.)
- b. **Single Line Diagram** Provide a complete set of electrical drawings showing the electrical relationship and descriptions of the significant electrical components such as: PV modules, inverters, electrical service, DC disconnects, AC disconnects, utility meter, performance meter, junction boxes, wiring specs, the primary switchgear, secondary switchboard, protective relays, transformers, generators, circuit breakers, with operating voltages, capacities, and protective functions of the Generating Facility, the Customer's loads, and the interconnection with PWP's Distribution System.

If final drawings are not available at the time of application, submit two complete sets of conceptual drawings providing the minimum necessary attributes of the solar PV system Design. For a list of the necessary attributes, click here.

- c. **Copy of the site drawing** showing the physical relationship of the significant electrical components of the Generating Facility such as modules, inverters, transformers, and control panels, the Customer's loads and the interconnection with PWP's Distribution System. Diagram must show the approximate location of all major electric components including solar modules, inverters, electric output meters, combiner boxes, and the A.C. manually operated disconnect devices on the site plans. Here is a SAMPLE.
- d. Copy of a completed report from the California Solar Initiative's EPBB Incentive Calculator. If you have questions about completing this requirement for installations in Pasadena, read instructions here.
- e. **Shading Analysis Report** generated with the use of a solar assessment tool such as the "Pathfinder," "Solmetric" or any equivalent technology.
 - For systems up to 10 kW CEC-AC with rectangular shaped areas, a shading analysis must be done for each separate solar array by placing the instrument at the center of where the array will be located and taking a reading.
 - For systems with irregular shaped array areas and/or a capacity rating larger than 10 kW CEC-AC, a shading measurement must be taken at major each corner.
 - For more information about proper shading input requirements, please refer to Section 7 in the CSI Incentive Calculator User Guide.
- f. Two (2) original copies of the Interconnection Agreement and Net Metering Agreement (customer must wet sign both copies).
- g. The Net Metering and Surplus Compensation enrollment form. More information on compensation for your system's net surplus electricity can be found here.
- h. **Copy of the signed contract** between Customer and Installer. For commercial, non-profit and government institutions, a signed letter on company letterhead clearly stating the name of the selected solar vendor is sufficient while the contract is being processed.
- i. **Letter of approval** from the Home Owners Association's Board of Directors (if applicable.)

Mail complete application package to:

Pasadena Water and Power Attn: Pasadena Solar Initiative 150 S. Los Robles Ave. Suite 200 Pasadena, CA 91101

STEP 4 – PWP APPLICATION APPROVAL & RESERVATION

Pasadena Water and Power staff will review application package and verify required documents for completeness and accuracy. PWP' Engineering Department will evaluate application package free of charge. PWP will evaluate application package and approve or reject the installation.

When the application is approved, a PWP Approval and Reservation Letter will be sent by PWP to customer. Installer will be also notified via fax or email. Installer (or customer) must bring this letter when applying for a building permit to the City's Department of Planning and Development.

Once PWP approves the application, a rebate amount will be reserved for you for a limited time. To claim your rebate, your solar installation must be completed within 9 months of the application approval for existing facilities, and within 18 months for new construction.

If the application is not approved, PWP will contact installer or customer and discuss necessary corrections to the application or supporting documents.

Vendors/installers who need assistance from PWP during the conceptual PV system design, must pay the Initial Review fee as specified in the "Application and Interconnection Process' Section of PWP's Distributed Generation Interconnection Requirements (Regulation 23).

STEP 5 – BUILDING PERMIT APPLICATION

A building permit from the City's Department of Planning and Development is required before installing a solar system on your home or facility.

Installer (or customer) must bring PWP's Approval and Reservation Letter when applying for a building permit from the City's Department of Planning and Development.

Permit Center is located at 175 North Garfield Av. Pasadena, during our business hours, (Monday - Thursday 8:00 a.m. to 5:00 p.m. and Friday 8:00 a.m. to 12:00 p.m.)For more information in how to obtain a building permit, visit the Permit Center website or call 626-744-6646

STEP 6 - SOLAR SYSTEM INSTALLATION

Installers must be familiar with PWP's rules and regulations for electrical design and installation (Regulation 21) and Distributed Generation Interconnection Requirements (Regulation 23) including metering requirements Systems must be installed in conformance with the manufacturers' specifications and with all applicable electrical and building codes and standards. Installer will work with an electrical inspector from the City's Department of Planning and Development to make sure the installation is in compliance with local codes.

STEP 7 - SOLAR SYSTEM INSPECTION

As part of the installation process, your solar installer generally handles permits required by the city. When the solar installation is complete, a building inspector from the City's Department of Planning and Development will verify that the system conforms to building and safety codes.

After the solar system passes inspection, the solar system must remain in the off position. Turning the solar system on before the standard utility meter is replaced with a solar meter may cause billing errors and additional on the customer's electric bill.

Please note the PV system will not be allowed to interconnect to the grid until PWP's Interconnection Agreement and Net Metering Agreement is fully executed (signed) by both customer and the City of Pasadena AND customer has received written authorization to operate the system from PWP.

STEP 8 – SUBMIT INCENTIVE CLAIM FORM

After solar system has been signed off by building inspector, installer (or customer) submits the Incentive Payment Claim Form (IC) to PWP with the following supporting documents to start the solar incentive rebate process:

- Incentive Payment Claim Form
- Copy of the Building Final Inspection Sign-off
- Copy of Permit fees receipt
- Copy of Energy Efficiency Audit Report
- Copy of the itemized final sales invoice
- Completed original copy of PSI Payment Assignment Form (if applicable)

STEP 9 - SOLAR INTERCONNECTION CLEARANCE

PWP personnel will inspect, test and verify that the system was installed as designed and specified in the original application and the equipment functions properly.

After all required documents on Step 8 have been submitted, Pasadena Water and Power will replace old utility meter with a new Net-Meter capable of spinning and recording net energy in both directions. As soon as new utility meter is installed, PWP will send Letter of Interconnection authorizing customer to turn the solar system on.

The customer may now **turn their solar system to the "ON" position** *after* the Letter of Interconnection is received.

>> Click here for additional information on meter requirements.

STEP 10 – RECEIVE REBATE CHECK

Customer will receive a rebate check within 2-3 weeks after submitting all the required PSI program documents.

COMMENTS/QUESTIONS

If you have any comments, suggestions, or questions regarding the Pasadena Solar Initiative, please call the Customer Programs Hotline at 626-744-6970 or write to solar@cityofpasadena.net