

# ANAHEIM PUBLIC UTILITIES

## Residential Solar Energy Program Handbook (2009)

Solar Energy technology converts sunlight into electricity that can be used to power your home. Solar Energy systems are usually mounted on roofs; they are modular, easily expandable, create no noise or pollution and are reliable energy generators. An added benefit to solar energy systems is that they require low maintenance and have long service lives.

Anaheim Public Utilities offers financial incentives for those who install solar energy systems at their home. The following program guidelines are available to assist those installing solar energy on their homes and were designed in compliance with [State of California Bill 1 requirements](#).

### How the Program Works

#### Getting Started

To get started, we recommend you understand the amount of energy you use and how you use it, and the projected costs of a solar energy system to meet your needs. Start by getting a free Home Utility Checkup, [online](#) or [at your home](#) – this will help you understand how you use energy at your home and ways to save. Then go to the Anaheim Solar Map and the Clean Power Estimator to get an idea about the cost of solar energy on your home.

#### Help is Here!

Program Manager: 714.765.4182

[Home Utility Checkup at Home](#)

[Home Utility Checkup Online](#)

[Anaheim Solar Map](#)

[Clean Power Estimator](#)

#### Finding an Installer

When you are ready, identify someone to install your solar energy system in compliance with the City of Anaheim's building requirements.

- The Program requires that your installer have a current A, B, C-10, or C-46 contractor's license. We have provided a few helpful links to assist you in finding a licensed solar energy installer in your area – please see the "Help is Here" box in this section.
- As part of the State of California goals to install 3,000 megawatts of solar energy throughout the State, optimum operations assurance is included in the SB-1 requirements. It is for this reason that performance monitoring and maintenance are recommended and required if they are economically reasonable.
  - Your quote must include a separate line item for a performance monitoring and maintenance five-year service contract (PMRS.) Most solar energy installers offer this service as part of their installation package. But if yours does not, we have provided a link for PMRS providers in the "Help is Here" box in this section.
  - If the cost of the PMRS is less than 1% of the total installed cost of the solar energy system, then the PMRS will be required.

#### Help is Here!

[California Energy Commission Solar Energy Installer Database](#)

[State of California License Board](#)

[Better Business Bureau](#)

[PMRS Providers](#)

- If the cost of the PMRS is greater than 1%, it will not be required. As an alternative, the installer will have to provide you with a recommended maintenance oversight plan that addresses at a minimum the following:
  1. Cleaning schedule for the array to remove dirt and dust buildup
  2. Periodic checking of electrical connections (for corrosion, etc.)
  3. Checking the inverter or instantaneous power, long-term energy output, and diagnosing and taking corrective action if production is significantly lower than expected
  4. Checking for tree/plant growth or other obstructions that are causing shading on the array and suggestions to minimize or eliminate the shading

**Reserving Your Incentive**

Once you have accepted a proposal, reserve your incentive with the City of Anaheim Public Utilities.

- Your installer will use the PowerClerk database to complete the reservation request. The following support documentation is required:
  1. **Signed** Reservation Request Form from the PowerClerk database
  2. Itemized cost proposal (detailing costs of modules, inverter(s), and labor) including separate line item quote for PMRS
  3. Solar potential analysis/shade study using a Solar Pathfinder or equivalent solar assessment tool
- Anaheim Public Utilities will send you a confirmation letter once your reservation has been approved.
- Complete a Home Utility Checkup – at your home or online – as a requirement of funding.

**Help is Here!**

[PowerClerk](#)

[Home Utility Checkup at Home](#)

[Home Utility Checkup Online](#)

**Design Requirements**

When installing a solar energy system in the City of Anaheim, all systems must comply with Building Department codes and requirements. Design packages should include:

- 3 copies of site plans, roof plans, 1-line diagram (sized no smaller than 18" x 24"), and all appropriate equipment data sheets (4 copies of plans required if service panel is > 200 Amps – see Plan Check section for details)
- Compliance with Anaheim’s Interconnection Guidelines
- Compliance with Anaheim Building Department Plan Check
- Compliance with Anaheim Fire Department’s Specifications and Requirements

Please note: all solar energy installations require a meter socket installed after the inverter (please see “Reference 1-Line Diagram”); Anaheim Public Utilities does not accept ringless sockets or panels. The meter for this socket will be installed, owned, and operated by Anaheim Public Utilities.

**Help is Here!**

[Interconnection Guidelines](#)

[Building Department Plan Check Requirements](#)

[Fire Department Specifications and Requirements](#)

[Reference 1-Line Diagram](#)

## Plan Check/Permit

To further support your commitment to renewable energy, Anaheim Public Utilities offers a permit fee waiver for those installing solar energy systems on their homes; the fee waiver is issued after plan check is approved. Depending upon the size of the site main service panel, plan check may be required first by the Anaheim Public Utilities Electrical Engineering Division. Please note the following:

- If the site main service panel is less than or equal to 200 Amps, then take the 3 copies of the plans and design package directly to the Building Department and submit them for plan check; plan check takes approximately 10-15 working days.
- If the site main service panel is greater than 200 Amps, then take the 4 copies of the plans and design package directly to the Anaheim Public Utilities Engineering Division for interconnection approval; plan check takes approximately 5 working days. After interconnection approval, then plans must be submitted to the Building Department for plan check. Submittal for interconnection approval requires a completed [Interconnection Application](#) signed by the property owner. One set of plans will remain with the Electrical Engineering Division.

### Help is Here!

Planning Services and Building  
Division: **714.765.5153**  
200 S. Anaheim Boulevard, Floor 1  
Anaheim, CA 92805

Utilities Electrical Engineering:  
**714.765.4208**  
201 S. Anaheim Boulevard, Floor 7  
Anaheim, CA 92805

[Interconnection Application](#)

## Net Metering Agreement

Net metering is an additional benefit of being a solar energy generator. At your home, when the sun is shining, you may generate more electricity than you need. At these times, the electricity flows through the Utility meter onto the electric grid, and at the end of the billing period you only pay for the household net use of electricity. Net metering requires an agreement between you and the City of Anaheim. Once a permit has been issued, the City of Anaheim will generate an "Interconnection Agreement for Net Energy Metering" for your approval. A sample of an agreement is available here for **review only**.

### Help is Here!

[Interconnection Agreement for Net Energy Metering](#)

## Inspection

Your inspection represents the final stage before you are ready to turn your solar energy system on at your home. The following steps will assist you in getting your system approved to code and operating quickly. Please refer to the "Building Division Inspection Record" that you receive with your permit as a guide.

1. First contact the Fire Department at 714.765.5041 to schedule final inspection by the Fire Department.

### Help is Here!

Fire Department Final: **714.765.5041**

Electrical/Building Department Final:  
**714.765.4626**

Program Manager: **714.765.4182**

2. After the Fire Department has approved and signed on the Inspection Record, contact the Inspection automated scheduling system 714.765.4626 to schedule final electrical inspection by the Building Department. The Electrical inspector will sign the Inspection Record under “Electrical Final” and “Building Final.”
  - The Electrical inspector will notify Anaheim Public Utilities within 24 hours to install your new meters.
3. Once the Anaheim Public Utilities receives notice that your meter is released, a new digital meter will be installed on the service, and a power production meter will be installed after the inverter. Your system is then ready for operation.

The Program Manager will contact you about a convenient time for a verification check on the installation of your system. This is an in-field verification of your system panels, inverters, orientation, and shading and you can continue to operate your system. Please note, it is necessary to have the installer at your home during the verification check.

## Receiving Your Incentive Payment

Now that you have the solar energy system up and running, you are eligible to collect your incentive payment. Submit the following documentation to the Program Manager:

1. **Signed** “Residential Solar Energy Program – Application.”
2. **Signed** “Letter of Assignment” if applicable.
3. Copy of final paid invoice (note: must reconcile with itemized proposal.)
4. Proof of PMRS or receipt of maintenance oversight plan.
5. Copy of warranties including the following information:
  - Size of System Installed (AC Watts)
  - Description of System
  - Address of where system is installed
  - Owner of System
  - Warranty information must include proof of 10 year or better warranty on modules
  - Warranty information must include proof of 10 year or better warranty on inverter
  - Warranty information must include 10 year or better warranty against breakdown or degradation in electrical performance of more than 10 percent of system’s rated electrical output from originally rated output
  - Date of when warranty goes into effect
  - Any exclusions
  - Contact and instructions for customer when they require warranty service
  - **Signature** of contractor providing the warranty

**Help is Here!**

Program Manager: **714.765.4182**

[Residential Solar Energy Program -- Application](#)

[Letter of Assignment](#)

If incentive is being assigned to the installer, retailer, or person/entity other than the homeowner, a W-9 **signed** by the person/entity receiving the incentive is required.

## Anaheim Solar Map

Anaheim Public Utilities is happy to count you as one of our partners in increasing solar energy power in Anaheim. In our effort to support expansion of solar energy in our City, we have developed a web-accessible solar map for estimating solar electric potential on each rooftop in Anaheim. The website will also displays existing solar installations in the City of Anaheim as a way of showing how many homeowners and businesses support solar energy and have taken action toward improving Anaheim's clean energy efforts.

We would like to include information about your solar energy installation on the website! If you would like to participate, please complete the attached form and return it to the Solar Energy Program Manager:

Solar Energy Program  
c/o Program Manager  
201 S. Anaheim Boulevard  
Suite 801  
Anaheim, California 92805

### Help is Here!

Program Manager: **714.765.4182**

[Solar Map Letter of Consent](#)

## For More Information – Help is Here!

1. Call Anaheim Public Utilities at **714.765.4182** during regular business hours (8 a.m. – 5 p.m. Monday through Friday).
2. E-mail our Program Manager at [dpredisik@anaheim.net](mailto:dpredisik@anaheim.net)