

SOLAR ROOFTOPS

Program Guidelines Community Solar

Effective: November 2, 2016



1.0 Overview

These Guidelines provide the background information and procedures for participation in the Los Angeles Department of Water and Power's (LADWP) Community Solar Program (CSP), specifically the Solar Rooftops Program (SRP).

The SRP will allow the LADWP to install photovoltaic (PV) solar systems on the rooftops of customers in exchange for a fixed monthly lease credit of \$30 per month, or \$360 per year, which pays for the use of our customer's property. Only those single family homes that 1) are owner occupied, 2) meet all the LADWP and Los Angeles Department of Building and Safety (LADBS) expedited PV installation criteria, 3) are a single story, and 4) have suitable rooftops with composite shingle roofing will be accepted in order to protect the safety of program participants and LADWP personnel.

The SRP offers an opportunity for approximately 400 low-income, lifeline, time-of-use, and standard residential customers in the Los Angeles area to participate. The SRP will enable customers to help the LADWP meet its renewable energy goals, help reduce overall greenhouse gas emissions, and support local job creation. In addition, traditional solar participation barriers will be eliminated; there are no up-front costs/fees and no credit checks required to enroll.

1.1 Purpose and Guiding Principles

The LADWP is committed to solar power as a clean, efficient, and sustainable source of energy. Local solar is an important component of the LADWP's renewable energy programs and will help the LADWP meet its renewable energy targets, while reducing the carbon footprint of its power generation portfolio. In an effort to make solar projects available to more residential customers, especially those in neighborhoods with low solar penetration, the LADWP has created its Community Solar Program. These Guidelines cover the Solar Rooftops Program.

The LADWP has the opportunity to couple an energy efficiency (EE) program with SRP participation. The LADWP Home Energy Improvement Program (HEIP) will be used as a partnering program to increase customer awareness. HEIP provides an energy audit of a customer's home and deploys skilled labor to apply energy efficiency improvements. Efforts between the two programs can be coordinated to improve the usage of resources (material, labor, etc.) and lower program costs.

In addition, training is an integral part of the SRP. The LADWP's current workforce is rapidly aging so we are striving to train the next generation of highly skilled employees for our workforce. IBEW Local 18 and the LADWP have developed the UPCT Program to help meet this challenge with locally developed labor. The LADWP plans to utilize Utility Pre-Craft Trainees (UPCTs) during the construction of the rooftop PV systems.

COMMUNITY SOLAR PROGRAM (CSP) OVERVIEW	
Category	Solar Rooftops Program (SRP)
Program Capacity	Up to 1 MW
Estimated Number of Customers	300-400
Program Structure	<ul style="list-style-type: none"> The LADWP will build PV solar systems, 2-4 kilowatts (kW) each, on customers' rooftops. The PV solar systems will be connected directly to the LADWP Grid. The LADWP will pay customers for the use of their rooftops and will obtain sole rights to the energy and environmental attributes produced.
Economic Compensation	<ul style="list-style-type: none"> The lease payment is \$30 per month for all PV solar system sizes. Once the PV solar system is installed on a roof then a \$360 prepayment check will be issued to the homeowner. The first prepayment is designed to give customers an incentive to sign up. 30\$month X 12s year X 1 = \$360. Prepayments may be made on an annual basis, at the discretion of the LADWP. If a customer leaves the program before the lease's term, then that customer will be required to pay back the LADWP a prorated portion of the prepayment. Lease payments may be handled through monthly on-bill credits, at the discretion of the LADWP.
Program Benefits and Highlights	<ul style="list-style-type: none"> No up-front cost or annual fees. No credit checks. No O&M responsibilities for the customer. Guaranteed customer compensation regardless of energy production. System can be twice removed at no expense to the customer: <ul style="list-style-type: none"> Once for rooftop repairs Once at the end of the program term. <p>Customers will be supporting renewable energy, helping to create local jobs, helping to reduce carbon footprint and lessen the impact of global warming, and otherwise protecting the environment.</p>
Eligibility	<p>Open to customers located in the Los Angeles area with the following characteristics:</p> <ul style="list-style-type: none"> Have a rate schedule of R1A-Standard Residential, R1B - Time-of-Use, R1D-Low-Income, or R1E-Lifeline. Customer's account must be in good standing. The home must be: <ul style="list-style-type: none"> Owner occupied A single story, single family home with composite shingles. Able to satisfy LADWP evaluation(s) and other criteria.

2.0 Eligibility Requirements

The SRP could generate approximately 300-400 enrollment slots for customers located in the Los Angeles area to participate. Due to the limited amount of space, the LADWP has developed a set of filters to refine the eligibility pool.

2.1 Applicant Eligibility Requirements

Applicants must satisfy the following requirements in order to be considered for the program.

1. Each LADWP customer can be categorized into various primary electric rate classes. The only primary electric rate class that will be admitted for SRP participation is R1 - Residential Service. Future phases of the SRP may incorporate other residential and commercial rate classes.
2. Schedule R-1 - Residential Service
 - R1-A – Standard
 - R1-B – Time-of-Use
 - R1-D – Low-Income
 - R1-E – Lifeline
3. Applicant's LADWP customer account must be in good financial standing.
4. Customers that are currently enrolled with the Solar Incentive Program (SIP) are ineligible for the SRP.
5. Applications should be completed in full and signed by the primary LADWP customer account holder and homeowner; if an Application contains two unique persons for the customer account holder and homeowner name, then the Application may be delayed or disqualified.
6. Customers will be given a zip code - based solar penetration indicator (i.e., A-low, B-medium, C-high), as defined by the total installed SIP capacity (Residential Sector Only) per the total number of LADWP residential accounts, in each respective zip code. The indicators determine when an Applicant can apply for enrollment; see Section 2.2 for more details.

2.2 Enrollment Priority

A queue management database will be used to accept all applications. Submitting an Application does not guarantee admission into the program as there is limited space available.

There will be three defined enrollment/eligibility periods based on the solar penetration indicator. Only Applicants with homes in certain zip codes will be allowed to apply during a designated enrollment period. Table 1 shows the solar penetration indicator for Los Angeles area zip codes. The SRP is primarily intended to target communities with Low Solar Penetration. The Table 1 areas of Low Solar Penetration are similar to the areas with high scores using the socioeconomic and environmental factors identified in the California Communities Environmental Health Screening Tool, Version 2.0 (CalEnviroScreen 2.0).

The following enrollment/eligibility periods are broken down as follows:

- **Enrollment Period 1**
 - Starts on the SRP Launch Date.
 - Stops at the end of the sixth month from the SRP Launch Date.*
 - Only group A zip codes are eligible.
- **Enrollment Period 2**
 - Starts at the end of Enrollment Period 1.
 - Stops at the end of the sixth month after its start.*
 - Only group A and B zip codes are eligible.
- **Enrollment Period 3**
 - Starts at the end of Enrollment Period 3.
 - All groups (A, B, and C zip codes) are eligible for enrollment.

** If the SRP is unable to generate sufficient Applications, then the enrollment periods may be shortened at the LADWP's discretion.*

At the end of each month, in any enrollment period, all pending completed Applications eligible for consideration in that enrollment period will be reviewed in the order received. Selection of Applications to receive the evaluation described in Section 4.7 will be made by the LADWP at its sole discretion consistent with the following objectives:

1. Be geographically diverse across the City of Los Angeles when installing distributed generation resources.
2. Aggregate projects in order to optimize the LADWP's resources (i.e., labor and equipment).
3. Build SRP PV solar systems on the most suitable homes.

TABLE 1- SOLAR ROOFTOPS PROGRAM GROUPS BY ZIP CODE

LOW SOLAR PENETRATION							MEDIUM SOLAR PENETRATION					HIGH SOLAR PENETRATION				
GROUP A							GROUP B					GROUP C				
90023	90011	90020	90036	90063	90501	91330	90001	90035	90056	90291	91405	90041	90402	91306	91335	91364
90002	90012	90021	90037	90067	90502	91346	90004	90039	90059	90293	91411	90049	90403	91307	91340	91367
90003	90013	90024	90038	90212	91041	91355	90008	90042	90065	90710	91423	90064	90732	91311	91342	91401
90005	90014	90025	90044	90232	91105	91504	90019	90043	90066	90717	91601	90068	91040	91316	91343	91403
90006	90015	90028	90057	90245	91205	91505	90026	90045	90094	90731	91602	90069	91042	91324	91344	91406
90007	90016	90029	90058	90275	91210		90027	90046	90230	90744	91605	90077	91214	91325	91345	91436
90009	90017	90031	90061	90292	91305		90032	90047	90247	91303	91606	90210	91302	91326	91352	91604
90010	90018	90033	90062	90405	91309		90034	90048	90248	91402	91607	90272	91304	91331	91356	

Data is derived from the following datasets: 1) Total LADWP Installed SIP Capacity – Residential Sector Only (as of 11/2016) and 2) Total LADWP Residential Accounts (as of 11/2016).

3.0 Application Submission

All program materials, including the Solar Rooftops Program Lease Agreement (SRPLA), are available on the CSP website (www.ladwp.com/csp). If you have any questions, please contact the Community Solar Program staff before applying at CSP@ladwp.com or (213) 367-4869.

LADWP reserves the right to reject all Applications. The terms of the SRPLA are non-negotiable. Applicants must review the terms of all program documents carefully before submitting an Application. All submitted materials will become property of LADWP and may be incorporated into a contract between LADWP and the selected Applicant.

3.1 Required Information and Documents

In order for an application to be considered completed, all of the following items must be submitted; otherwise, the Application will be considered nonresponsive and disqualified. Please see Section 3.2 of the Guidelines for the submission procedure.

- Completed Solar Rooftops Program Application (Appendix A)
- Copy of your LADWP bill (page 1 only)
- Proof of home ownership

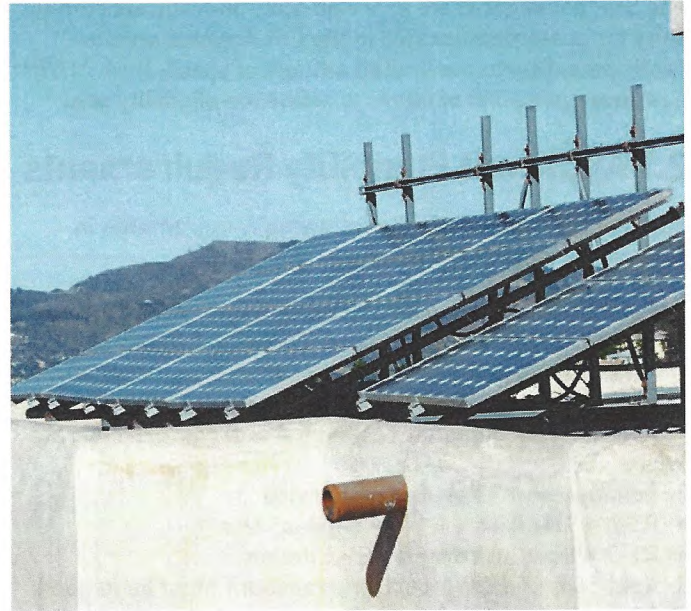
3.2 Application Submission Procedure

Applicants shall submit their Application and attachments online at www.ladwp.com/csp after the first Enrollment Period begins. To complete an online Application, customers must have created an online LADWP account. If a customer has not registered for their online account, then they can do so by registering at www.ladwp.com. For any technical assistance, please contact LADWP at 1-800-342-5397. If a customer is unable to submit a complete application online, then completed materials may be mailed to:

Community Solar Program
111 North Hope Street, Room 968
Los Angeles, CA 90012

3.3 Solar Rooftops Home Evaluation

Applicants interested in participating in the SRP must be able to pass the expedited LADBS permitting process for PV solar installations and meet the criteria regarding the home's solar potential detailed in Section 4.7.



4.0 – Solar Rooftops Program Design

The SRP design characteristics are listed below:

1. Customer Offer
2. Site and Scale
3. Economic Proposition
4. Payment Procedures
5. Program Fees
6. Environmental Attributes
7. Home Evaluation Criteria
8. Program Length
9. Operation and Maintenance
10. Safety

An overview diagram of the SRP is shown in Figure 1.

4.1 Customer Offer

The LADWP will own and build PV solar systems in the Los Angeles area on our customers' rooftop space as long as the rooftops meet criteria described in Section 4.7. The PV solar systems will be connected directly to the LADWP's grid on the utility side of the electric meter; there will be no net energy meter, and no energy will be delivered to the Applicant's home directly from the installed PV solar system. LADWP will be in charge of all PV solar installation tasks, which include site evaluations, permitting, construction, operation, and maintenance. Applicants simply have to sign up, be selected, have their home pass a rooftop evaluation, and allow LADWP to access their property for PV solar system installation before they will begin receiving lease payments. An overview of the SRP is shown in Figure 2.

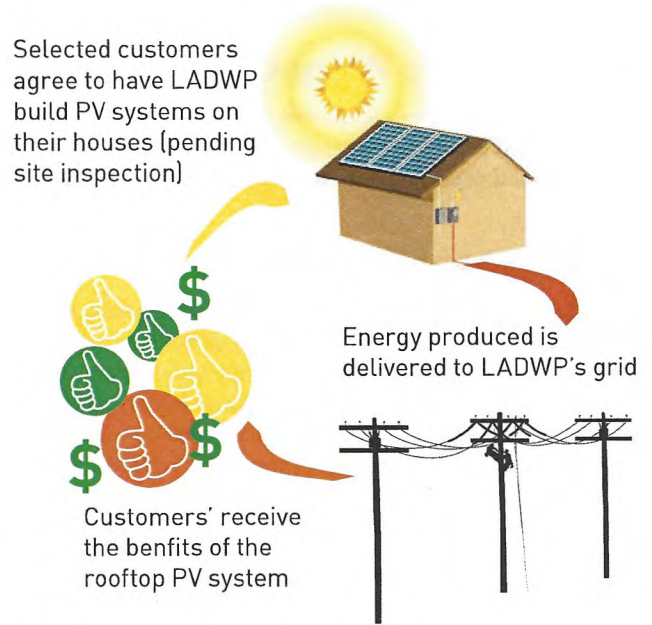


Figure 1

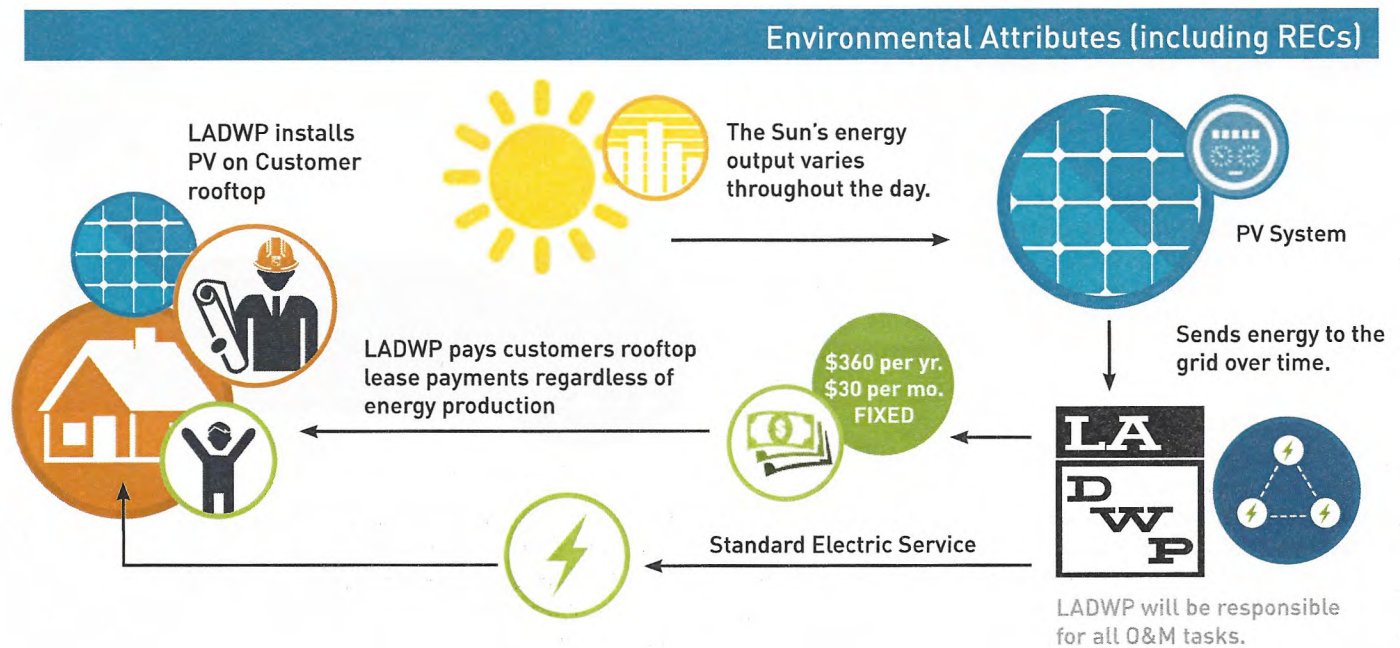


Figure 2 – Solar Rooftops Program Overview Diagram

4.2 Site and Scale

The LADWP will install a 2 kW, 3 kW, or 4 kW PV solar system on a customer's rooftop, using standardized designs for each size to minimize engineering costs. The system size will be determined following an in-depth evaluation of the Applicant's rooftop by LADWP personnel.

4.3 Economic Proposition

The customer compensation will be the same regardless of the system capacity measured in kilowatts (kW). Each customer will receive \$360 per year for the use of their rooftop.

4.4 Payment Procedures

When LADWP completes the PV solar installation, the participant will receive a prepayment of \$360 for the first year of participation. Participants will then receive a prepayment of \$360 in each subsequent year, based on the month when their PV solar system was installed, or monetary compensation in the form of \$30 monthly on-bill credits, at the discretion of LADWP. If the participant leaves the program before the applicable lease's term, then that participant will be required to pay back the LADWP a prorated portion of that year's prepayment, if applicable.

4.5 Program Fees

In order to incentivize customers, the SRP will have no sign up/annual fees.

4.6 Environmental Attributes

LADWP will retain and own all associated environmental attributes as defined in the SRPLA.

4.7 Home Evaluation Criteria

Figure 3 – Applicant Home Evaluation process

4.7.1 LADWP On-site Evaluation

The SRP will only include those homes that meet the LADBS expedited PV permitting criteria for program participation. In addition, LADWP will incorporate additional home evaluation criteria to determine the home's solar potential. An on-site evaluation of the home will be performed by LADWP staff to determine the home's eligibility. Some of the questions that will be answered during the home evaluation are:

- Is the home a single story?
- Is the roofing material made of composite shingles?
- Does the roof have only one layer of roofing material?
- What is the rafter size and spacing?
- Does the roof structure appear to be structurally sound, without signs of alterations, deterioration, or sagging?
- What is the pitch of the rooftop?
- What is the direction of the rooftop plane (i.e. south, southwest)

- Is there any significant shading of the rooftop by nearby structures (i.e. trees, buildings)?
- Is there enough clearance to install an additional meter near the existing electrical panel?
- Is there an existing overhead electrical connection?
- Is there an easily accessible ground rod?

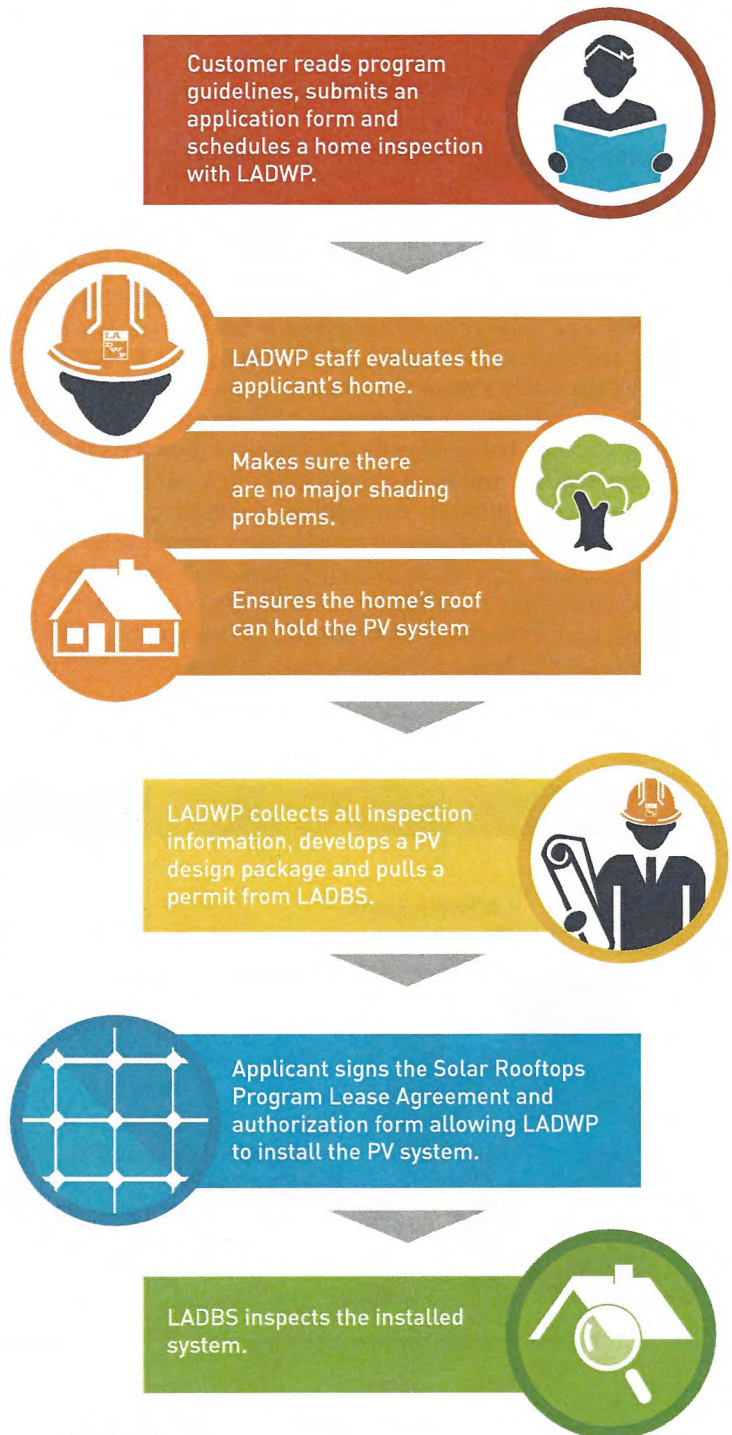


Figure 3

4.7.2 Permitting and Installation

If a home passes its on-site evaluation, the LADWP has chosen to submit a permit application to the LADBS for the installation of a PV solar system at the Applicant's home. Once the permit application is approved, the LADWP will build the solar installation. The Applicant must ensure that all LADWP personnel have a safe environment to perform the installation; this includes, but is not limited to, the temporary removal of pets, obstructions, and hazardous materials. Failure to do so may result in delay or disqualification of the Application.

4.7.3 Site Inspection/Field Evaluation

After a solar energy system is installed, an inspector from LADBS inspects the installation. This field evaluation is the final step before final project approval. The field evaluation ensures that the solar energy system has been installed properly and according to the approved plans. Evaluations focus on verifying that an installation is compliant with applicable building code, electrical code fire safety requirements, and other applicable criteria.

4.8 Program Length

The SRPLA term will be for 20 years from the date the solar array is installed. If the ownership of the home changes, through a sale or otherwise, the subsequent homeowner(s) takes the current homeowner's place in this agreement. Homeowner shall notify Community Solar staff, at msp@ladwp.com, no less than thirty (30) calendar days prior to transferring ownership of the home to the new homeowner. If the subsequent homeowner(s) does not want to participate in the program, they may submit a notice of termination. LADWP and/or the homeowner(s) can terminate the agreement with a 60-day written notice.

Within 60 days following early termination or expiration of the SRPLA, the LADWP shall remove the PV solar system at LADWP's cost. If the LADWP fails to remove any portion or all of the PV solar system within the required time period, such portion of the PV solar system shall be considered abandoned by LADWP, and Customer may remove and dispose of it.

4.9 Operation and Maintenance

LADWP has the sole responsibility for the operation of the installed rooftop PV solar system. Problems associated with the operation of the installed system should be brought to the attention of the Community Solar Hotline, 213-367-4869. All repairs required on the SRP PV solar system will be performed by the LADWP or personnel authorized by the LADWP.

4.10 Safety

Each PV solar system has been designed to provide a safe and reliable source of energy for many years. However, as with any source of electricity, certain precautions must be exercised to prevent accidental injury:

1. Homeowners must not attempt to make any repairs on the PV solar equipment.
Call the LADWP at 213-367-4869 to report any problems with the system.
2. Homeowners must not open any of the system cabinets or touch any exposed wiring.
Hazardous voltages can be present throughout the entire system at any time.
3. Homeowners must not attempt to remove or disconnect any of the photovoltaic rooftop modules.



Solar Rooftops Program Application

APPLICANT INFORMATION		APP# (office use only)											
SECTION 1: LADWP ACCOUNT AND PROPERTY INFORMATION													
LADWP Account Holder Name		LADWP Account Number											
		<table border="1"> <tr> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> </table>											
LADWP Service Address		City	Zip										
Daytime Telephone Number () -													
Email Address													
Do you live at the residence? <input type="checkbox"/> Yes <input type="checkbox"/> No		Do you own or rent your home? <input type="checkbox"/> Own <input type="checkbox"/> Rent											
Property Type (check one): <input type="checkbox"/> Single Family Residence <input type="checkbox"/> Apartment <input type="checkbox"/> Condominium/Townhome <input type="checkbox"/> Mobile Home <input type="checkbox"/> Duplex <input type="checkbox"/> Other:													
How did you hear about the program? <input type="checkbox"/> LADWP <input type="checkbox"/> Radio <input type="checkbox"/> Newspaper <input type="checkbox"/> Community Group(s) <input type="checkbox"/> Other:													
SECTION 2: SOLAR ROOFTOPS PROGRAM													
How tall is your home? <input type="checkbox"/> One (1) story <input type="checkbox"/> Two (2) or more stories													
Who is the best person to contact for your home evaluation?													
Contact's Daytime Telephone Number () -													
Best Time to Call: <input type="checkbox"/> 8-10am <input type="checkbox"/> 10am-12pm <input type="checkbox"/> 12pm-3pm <input type="checkbox"/> 3-5pm													
SECTION 3: CUSTOMER AGREEMENT													
By submitting this Solar Rooftops Program Application, I certify that the information I have provided is true and correct. I have read and met all program requirements per the SRP Guidelines. I have attached a copy of 1) my proof of home ownership (Property Tax Bill, Deed or Title Report) and 2) my LADWP bill (page 1 only). I authorize LADWP to perform a jointly scheduled site inspection of my home in order to finalize my eligibility status. I will provide a safe working environment for LADWP to perform a site evaluation(s), and I understand that an Application submission does not guarantee program participation.													
Print LADWP Account Holder (Applicant) Name	Signature		Date										