



Solar Rooftops Program Guidelines

Community Solar

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Appendices

Appendix A – Solar Rooftops Program Application

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 No. 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. • $30 \frac{\\$}{month} * 12 \frac{months}{year} * 1 year = \\$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 & 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. <p>The home must be:</p> <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.

A. 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.

- Schedule R-1 - Residential Service
 - R1-A – Standard
 - R1-B – Time-of-Use
 - R1-D – Low-Income
 - R1-E – Lifeline

B. Applicant's LADWP customer account must be in good financial standing.

C. Customers that are currently enrolled with the Solar Incentive Program (SIP) are ineligible for the SRP.

D. 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.

E. 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.

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

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).

Note: *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.

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 below in Figure 2.

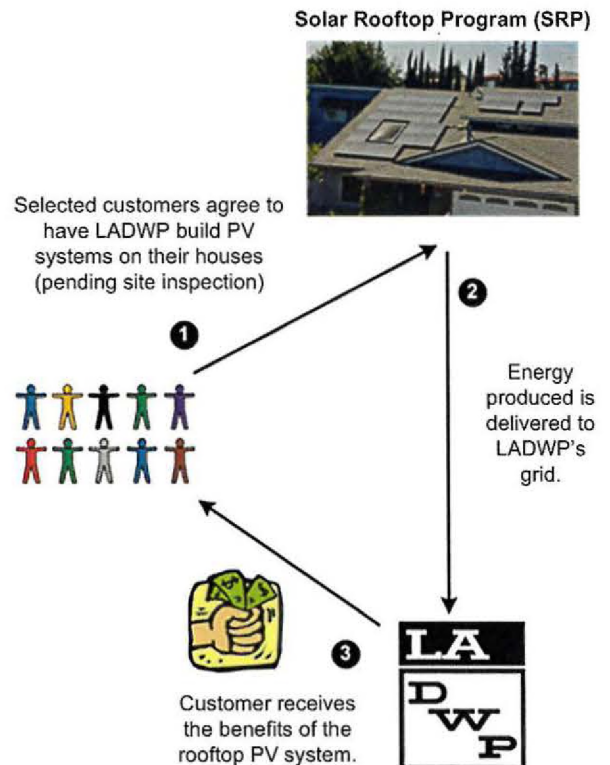


Figure 1 – SRP Overview

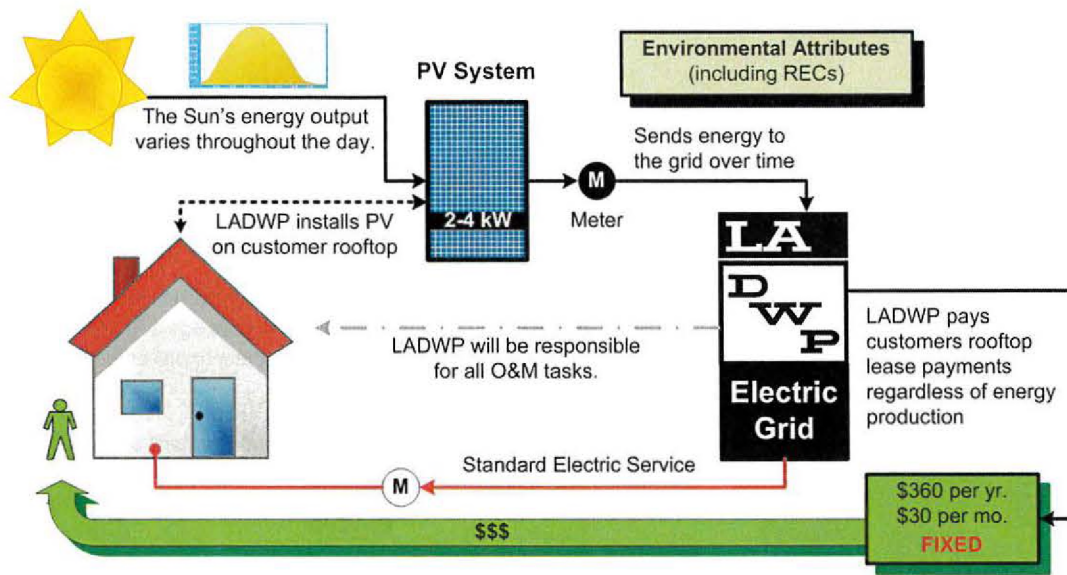


Figure 2 – Solar Rooftops Program Overview Diagram

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

An overview of the SRP evaluation process is shown in Figure 4.

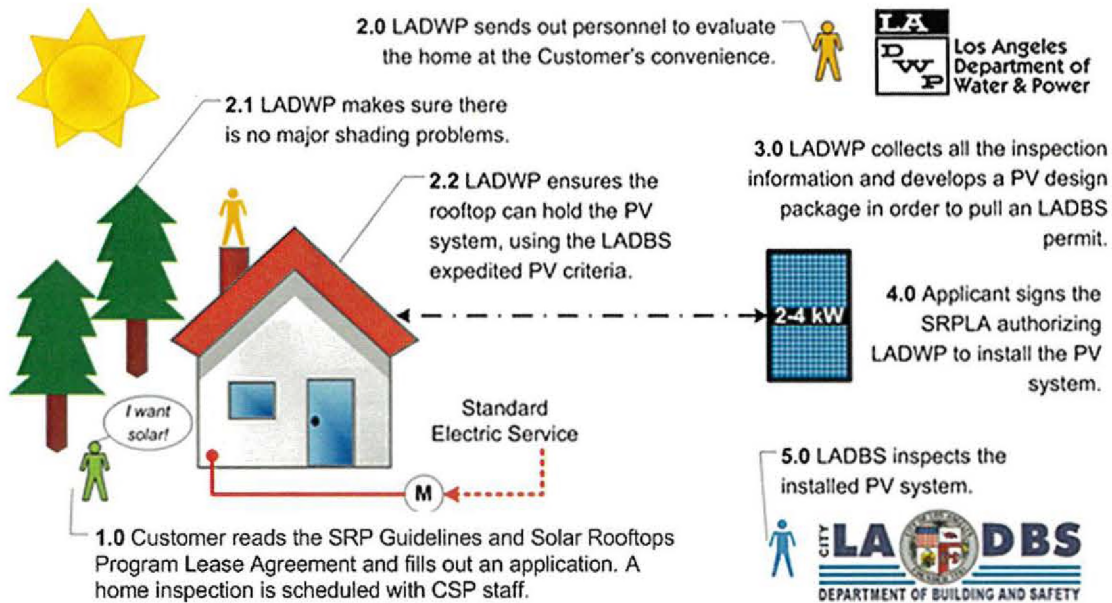


Figure 3 – Applicant Home Evaluation process

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?

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 csp@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.

Appendix A – SRP Application



Solar Rooftops Program Application

Part A: APPLICANT INFORMATION		App # (office use only)											
Section 1: LADWP Account and Property Information													
LADWP Account Holder Name:	LADWP Account # <table border="1" style="width: 100%; height: 20px; border-collapse: collapse;"> <tr> <td style="width: 12.5%;"></td> <td style="width: 12.5%;"></td> <td style="width: 12.5%;"></td> <td style="width: 12.5%;"></td> <td style="width: 12.5%;"></td> <td style="width: 12.5%;"></td> <td style="width: 12.5%;"></td> <td style="width: 12.5%;"></td> <td style="width: 12.5%;"></td> <td style="width: 12.5%;"></td> </tr> </table>												
LADWP Service Address:	City:	Zip Code:											
Daytime Telephone #: () -	Alternate Phone #: () -												
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:												
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 Name:												
Contact's Daytime Telephone #: () -													
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, I have attached a copy of all forms and agreements, I authorize LADWP to perform a jointly scheduled site evaluation of my home in order to finalize my eligibility status, and I will provide a safe working environment in order for LADWP to perform a site evaluation(s).													
Print LADWP Account Holder (Applicant) Name	LADWP Account Holder (Applicant) Signature	Date											

