



Los Angeles
Department of
Water & Power

RESOLUTION NO. _____

BOARD LETTER APPROVAL

Handwritten signature of Reiko A. Kerr in purple ink.

REIKO A. KERR

Senior Assistant General Manager – Power System
Engineering, Planning, and Technical Services

Handwritten signature of Martin L. Adams in blue ink.

MARTIN L. ADAMS

Chief Operating Officer

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DAVID H. WRIGHT

General Manager

DATE: September 17, 2018

SUBJECT: Solar Rooftops Program Pilot – Guidelines and Lease Agreement (Revised)

SUMMARY

The Los Angeles Department of Water and Power (LADWP) proposes improvements to the Solar Rooftops Program (SRP) Guidelines (SRP Guidelines) and Solar Rooftops Program Lease Agreement (SRPLA) to increase participation in the SRP, to create operational efficiencies that ensure that the goals of the SRP are met, and to further increase the reliability of existing electrical distribution systems and enhance resource management. Proposed improvements will allow more types of homes to be eligible, expand the available system sizes to be installed, enable the optimization of photovoltaic (PV) solar through integration with energy storage systems (ESS), and vary the lease payment with respect to the new system sizes and configurations.

The existing pilot program criteria make it difficult to make timely adjustments to the SRP Guidelines in order to accelerate customer participation in the SRP. Additionally, energy storage technology is developing at an accelerated rate; the SRP presents an opportunity to increase the reliability of existing electrical distribution systems and enhance resource management by integrating ESS in a proper and coordinated manner with SRP PV solar systems. Consequently, in order to expand LADWP's ability to carry out the goals of the SRP, expand customer eligibility, and optimize the delivery of power from the SRP systems, LADWP proposes improvements to both the SRP Guidelines and the SRPLA. Further, the attached Resolution delegates authority to the General

Manager to make timely and limited adjustments to the SRP Guidelines in order to accelerate customer participation by providing the flexibility to quickly respond to changing market conditions. Additionally, this change provides flexibility to better use the SRP to technically evaluate methods to improve LADWP's electric grid.

City Council approval of the use of the revised SRPLA is required pursuant to Los Angeles City Charter Section 606.

RECOMMENDATION

It is recommended that the Board of Water and Power Commissioners (Board) adopt the attached Resolution authorizing the improved SRP Guidelines, allowing the General Manager to make further limited improvements and revisions to the SRP Guidelines, and requesting City Council approval of future use of the revised SRPLA.

ALTERNATIVES CONSIDERED

LADWP's alternatives would be to: 1) continue with the current SRP Guidelines which have produced a low acceptance rate in the areas of low solar penetration and wait until the end of the original program to evaluate lessons learned, 2) expand customer eligibility at this time and allow for further program design flexibility through delegation to the General Manager but do not pursue efforts to test and verify the benefits of integrating energy storage into the SRP, or 3) expand customer eligibility at this time but do not allow for further program design flexibility through delegation to the General Manager and do not pursue efforts to test and verify the benefits of integrating energy storage into the SRP. The first and third alternatives could delay meeting short-term equity metric and initial SRP goals. The second alternative could result in redundant and inefficient testing outside the SRP of potentially helpful energy storage technologies, resulting in added delays and costs.

FINANCIAL INFORMATION

The proposed program improvements will not affect the original budget.

BACKGROUND

The main objective of the SRP is to construct up to one megawatt of residential solar throughout the LADWP service territory. On a broader scale, the goals of the SRP are to build clean distributed generation across LADWP's service territory, help modernize and transform the provision of electric service within the City of Los Angeles, and allow the LADWP to evaluate the feasibility of implementing an even larger program. It is essential to the evaluation of the SRP that customer homes receive a home inspection which allows LADWP personnel to gain a better understanding of the barriers customers face in adopting solar.

On November 15, 2016, the Board approved the pilot SRP Guidelines and the SRPLA. On December 14, 2016, the City Council approved the use of the SRPLA. On February 18, 2017, the SRP began accepting online applications and performing initial marketing and outreach efforts.

On March 22, 2017, the SRP began scheduling home inspections with applicants. Initial screening disqualified approximately 18 percent of total applications for home inspections solely for having a flat roof or two-story home, and thus did not receive home inspections. Other eligibility criteria have also limited participation in the SRP. In fact, such criteria have disqualified 195 applicants who were otherwise deemed feasible for participation. LADWP proposes the following program eligibility criteria revisions to broaden the pilot's initial eligibility which would potentially allow for an increased ability for customers to participate.

Single-Story House Requirement

LADWP recommends allowing two-story homes to also participate in the program. In some cases, a home consists of sections which are both single-story and two-story, such as homes situated on a hillside, which makes program eligibility ambiguous. Allowing two-story homes to participate eliminates ambiguity. It also allows a larger pool of applicants to apply. SRP inspections of two-story homes are not expected to be notably more burdensome than those for single-story homes.

Composite Shingles Requirement

LADWP recommends removal of the requirement that homes must have composite shingles in order to be eligible. Currently, this requirement has prevented customers with flat roofs from being eligible for the program solely because these types of roofs do not use composite shingles. LADWP will instead evaluate roofing material and, at its own discretion, make an eligibility determination on a case-by-case basis.

Adjustment to PV Solar System Sizes

The feasibility of many projects depends upon the size of an applicant's roof. Various homes have a large roof but with multiple small planes, which may not fit the template designs under the current SRP Guidelines. Staff recommends changing the system sizes to be installed from just two, three, or four kilowatts (kW) to any size less than or equal to 10 kW and greater than or equal to one kW, to allow for flexibility in the different types of roof configurations found in the City of Los Angeles.

In conjunction with eligibility criteria revisions, the following three major changes to the SRP are proposed.

Addition of Energy Storage

LADWP will evaluate offering energy storage systems and/or other DERs to SRP solar systems. Energy storage technology is developing at an accelerated rate; the SRP presents an opportunity to increase the reliability of existing electrical distribution systems and enhance resource management by integrating energy storage systems in a proper and coordinated manner with SRP PV solar systems. Consequently, in order to optimize the delivery of power from the SRP systems. This should also reduce the likelihood of redundant and inefficient testing outside the SRP of these energy storage technologies.

New Lease Payments

LADWP is also recommending varying lease payments to accommodate a wider range of system sizes. The new lease payments help ensure that participation in the SRP is mutually beneficial for customers and LADWP, while maintaining the existing, approved program budget. City Council approval to the SRPLA changes will authorize the General Manager to execute, for and on behalf of LADWP, agreements which include monthly lease payments less than or equal to \$100 made in accordance with the SRP Guidelines.

Delegation of Authority

Currently, the Board approves all changes to the SRP, except for non-substantive technical modifications to the Guidelines as necessary to correct errors, improve clarity, and facilitate administration of the program. This requirement has made it difficult to make timely adjustments to the SRP Guidelines in order to accelerate customer participation in the SRP. Thus, LADWP proposes that the General Manager be delegated authority to make timely and limited adjustments to the SRP Guidelines. Specifically, the Resolution authorizes the General Manager to make any revisions to the SRP Guidelines in order to modify the lease payment, not to exceed \$100 per month, for future participants and expand the home eligibility requirements to meet alternative, applicable Los Angeles Department of Building and Safety (LADBS) criteria regarding PV solar, limited ultimately by the existing \$13 million program budget. This should help the SRP accelerate customer participation by providing the flexibility to quickly respond to changing market conditions.

Due to operational impacts, a waiver to the Executive Directive 4 process was granted to LADWP by the Mayor's Office on September 10, 2018.

ENVIRONMENTAL DETERMINATION

Determined item is statutorily excluded pursuant to the California Public Resources Code Section 21080.35 in California Environmental Quality Act (CEQA). This exclusion applies to the revisions to guidelines and delegation of authority for the Solar Rooftops

Program, and use of related lease agreements, for the installation of a solar energy system on the roof of an existing building.

CITY ATTORNEY

The Office of the City Attorney reviewed and approved the Resolution as to form and legality.

ATTACHMENTS

- Resolution
- SRP Guidelines – Revised
- SRP Lease Agreement – Revised