

<b>DOCKET</b> 07-SB-1	
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August 29, 2007

Ms Claudia Orlando  
California Energy Commission  
Dockets Office  
Re: Docket No. 07-SB-1  
1516 Ninth Street, MS-4  
Sacramento, CA 95814-5512

Dear Ms Orlando,

Attached are the Los Angeles Department of Water and Power's comments on the Energy Commission's Staff Report, *Senate Bill 1 Eligibility Criteria and Conditions for Incentives for Solar Energy Systems*. We appreciate the ability to comment on this report and will continue to support the CEC's efforts to successfully implement SB1. If you have any questions, please call John Kerrigan at (213) 367-0381.

Sincerely,

Randy S. Howard  
Executive Assistant to the Chief Operating Officer

Enclosures

## **LADWP Comments on Senate Bill 1 Eligibility requirements Staff Report**

The Los Angeles Department of Water and Power (LADWP) is pleased to submit the following comments on the California Energy Commission Staff Report on Eligibility Criteria and Conditions for Incentives for Solar Energy Systems, Senate Bill 1.

The LADWP is the nation's largest municipal utility, providing reliable, low-cost water and power services to Los Angeles residents and businesses in an environmentally responsible manner. LADWP services about 1.4 million electric customers and 680,000 water customers in Los Angeles.

The City of Los Angeles has a goal of meeting 20% of its electrical energy needs with renewable energy by 2010, and increasing that amount to 35% by 2020. LADWP is aggressively pursuing large scale development of many new renewable energy resources, including wind, geothermal, biomass, small hydro and solar. Solar energy resources being pursued include large scale concentrating solar thermal plants as well as large and small scale solar PV projects.

LADWP also has a more specific goal of interconnecting 280MW of customer installed solar photovoltaic generating systems by 2017 as its part of the California Solar Initiative as outlined in SB1. This amount of solar capacity would provide about 2% of Los Angeles' electrical energy needs.

To date, more than \$60 million has been expended for customer incentives to install solar photovoltaic systems. Through June 2007, there have been a total of nearly 900 solar photovoltaic systems installed in Los Angeles totaling approximately 10.9 Megawatts (MW) AC. In addition, another 150 requests for solar photovoltaic systems have been requested and reservations confirmed for an installation incentive representing 1.8 MW AC.

LADWP is aggressively promoting and encouraging conservation and the maximum use of energy efficient measures. We are committed to building upon our strong energy efficiency foundation with recently implemented programs such as Custom Efficiency, Refrigeration, and New Construction.

As an example of the LADWP commitment to energy efficiency, we recently launched an initiative to distribute 50,000 free refrigerators to low-income families in Los Angeles. The entire exchange program is scheduled to save 675 gigawatt-hours of energy or roughly 2.8% of projected annual sales for the 2007-2008 fiscal year. This will save an estimated \$37 million in fuel costs, resulting in a savings to the LADWP of \$12 million.

The existing solar program is being revised to be compliant with SB1 and is scheduled for consideration on September 4, 2007 by the Board of Water and

Power Commissioners. LADWP has several concerns with the proposed CEC Staff Report on SB! Eligibility Requirements and they are outline below.

**The following sections address individual chapters in the staff report:**

**Chapter 3 – Solar Energy Component Standards:**

LADWP supports CEC staff's recommendations for additional standards for PV modules and inverters, but is concerned that additional standards may limit the number of eligible modules and inverters until manufacturers are able to fully comply. LADWP is also concerned that the use of additional equipment performance data may complicate an already complex PV calculator and application process. LADWP has been commended by many of its solar customers and installers who affirm that the LADWP solar application process is much simpler and faster than the present State process. Therefore LADWP does not want to complicate an already complex process if few benefits can be gained. LADWP is also concerned that requiring remote performance monitoring and reporting services (PMRS), particularly for smaller PV installations, may be too costly. Presently, LADWP requires that residential solar customers install an inexpensive electromechanical performance meter that can be read by the customer and LADWP meter reading personnel as needed.

**Chapter 4 – Solar Energy System Installation Standards:**

LADWP supports the concept of Performance Based Incentives (PBI) and currently manages a successful Expected Performance Based Incentive program. However, a true PBI program where customers are paid their incentive over five years based on actual production would be complicated to implement, requiring problematic modifications to billing systems. LADWP also recognizes that a PBI incentive is not always sufficiently economical for solar customers.

LADWP recommends that the size of system receiving incentives based on performance be changed from 100kW to 50kW. We also recommend that it be delayed until 2009 and scaled down to 30kW by 2011. Additionally, the program administrators should be given greater flexibility in defining size levels and terms for PBIs.

LADWP requires a shading analysis be performed and the results entered into the PV Watts v2 calculator. As such, we recommend that program administrators be given greater flexibility in developing shading protocols that meet their program needs.

The CEC staff's Peak Load recommendation to use the Time Dependent Valuation (TDV) multipliers to weight the hourly kWh system performance to account for time-of use production appears to be a complicated method for

providing Peak Load incentives. LADWP proposes to offer Estimated Performance Based Incentives (EPBIs) using the National Renewable Energy Lab's PV Watts v2 software to estimate annual energy production and offer an incentive based on a maximum annual energy production from a southerly oriented installation, as long as the orientation is anywhere from 180 degrees south to 270 degrees west. This maximum incentive along with a time of use rate to encourage more peaking energy production should be enough incentive for a customer to optimize high peak performance. LADWP recommends that program administrators be given greater flexibility in developing peak performance incentives as each utility may have different rate structures and peaking loads.

CEC staff also recommend using a 3<sup>rd</sup> party to field verify a PV system installation. LADWP successfully conducts 100% field verification and testing of all systems installed and believes that 3<sup>rd</sup> party verification is not needed or should be optional. Establishing such contracts for verification services may be complicated and expensive when in house staff can accomplish the work effectively and at lower costs. LADWP recommends that program administrators be given greater flexibility in defining their inspection and verification processes.

## **Chapter 5 – Energy Efficiency**

LADWP agrees with the “loading order” of energy resources, with energy efficiency being the first priority. We also support the idea that program participants should take advantage of cost effective energy efficiency opportunities. CEC staff recommend that high levels of energy efficiency be implemented by customers who wish to receive ratepayer-funded incentives for PV. LADWP is concerned that this would negatively impact the ability of customers to install PV systems and also make the SB1 goals difficult to achieve. LADWP believes it is important to educate our customers on energy efficiency measures and available incentives, but does not agree with the need to require customers to undertake energy efficiency measures as a prerequisite for solar incentives. Given the diversity of solar applicants and their individual needs, mandatory energy efficiency measures may be more discouraging than beneficial, adding a new level of complexity to solar programs. LADWP supports the concept of requiring customers to perform an energy efficiency audit and supplying them with information on energy efficiency programs. LADWP recommends that program administrators be given greater flexibility in defining how energy efficiency measures and incentives can be best utilized to save energy and complement the SB1 goals.

## **Chapter 6 – Other Eligibility Requirements Established in Statute**

LADWP believes that requiring remote performance monitoring and reporting services (PMRS), particularly for smaller PV installations, would be unnecessarily

expensive and burdensome to solar customers. Additionally, LADWP does not support a maintenance plan requirement for affordable housing and systems over 10KW.

**Chapter 7 – Guideline Development and Implementation Schedule:**

CEC staff have recommended the formation of a working group to further develop concepts discussed in the report for existing residential energy efficiency requirements. LADWP is willing to participate in this effort.

LADWP supports the CEC's recommendations to encourage energy efficiency measures for customers interested in installing solar PV systems. Nevertheless, we believe that requiring specific energy efficiency standards could prove too onerous for these individuals. This could serve as a major disincentive, severely curtailing the installation targets set forth by SB1.