

Los Angeles  Department of Water & Power

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February 25, 2016

The Honorable City Council
Office of the City Clerk
Room 395, City Hall
Mail Stop 160

Attention: Councilmember Felipe Fuentes,
Chairperson, Energy and Environment Committee

Honorable Members:

Subject: Council File 16-0136 – Energy Efficiency Heating and Cooling Program

In this response to Council motion (Blumenfield – Wesson) and to direction received from the Energy and Environment (Committee), the Los Angeles Department of Water and Power (LADWP) propose a new Air Conditioning Performance Program to assist customers in lowering their energy costs.

Following discussion of existing power rates and temperature zones in Committee in September 2015, LADWP received direction from the Office of Councilmember Blumenfield on the need for additional energy efficiency programs to assist ratepayers in controlling their bills. With temperatures in the Valley and throughout the City continuing to increase, relief from extreme heat is a growing health concern for ratepayers.

Background

In 2008, the LADWP proposed creation of two temperature zones to account for the relationship between increased temperature and increasing energy consumption. The basis for the two temperature zones for Power was a scientific summer average daily temperature study that was performed by the Department of Atmospheric Sciences of the University of California, Los Angeles. This data, when compared to the temperature zone data (Zone 9) utilized by the California Energy Commission (CEC), was found to be more specific to the micro-climates of Los Angeles. Based upon further analysis, it was determined that temperatures within the Los Angeles region could vary by as much as 20 degrees.

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LADWP recently completed an analysis of temperature changes (2008 to 2015) between the Valley and Metro areas using weather data from weather stations in the Civic Center, Los Angeles Airport (LAX), and Woodland Hills. Based on this analysis, the temperature in all three areas has increased over the last eight years, with the temperature in Woodland Hills increasing at a faster pace.

In examining the impacts of these temperature changes, one of the largest sources of energy usage for many residents and businesses is heating and cooling systems. While the LADWP offers residents and businesses with a wide variety of energy efficiency and water conservation programs and rebates, there is an opportunity to develop a new energy efficiency program to improve the performance of air conditioning systems.

Proposed Air Conditioning Performance Program Overview

LADWP, via a third-party administrator, will provide its residential and commercial customers with a complimentary Air Conditioning Performance (Program) to provide basic diagnostic and maintenance services including the following:

- Air filter replacement.
- Cleaning of the outdoor coils.
- Refrigerant charge check and adjustment.
- Air flow check and adjustment.
- Heating Ventilation Air Conditioning (HVAC) replacement incentive.

As an added benefit to customers replacing HVAC systems, LADWP will provide an incentive of up to \$150 (not to exceed cost of the unit) for the purchase and installation of a programmable thermostat. Programmable thermostats aid customers in automatically reducing heating or cooling when it's least needed.

Potential Energy and Cost Saving Benefits to Customer

During the hottest months of the year, residential electric consumption increases between 200kWh and 2000kWh each month depending on the geographical location of the home. This increase in electrical use is largely due to residents using their air conditioning systems more frequently and for longer periods of time. Program benefits include:

- Reducing cooling costs 20 percent – 30 percent.
- Reducing cooling costs by an additional 20 percent with the installation and proper use of a programmable thermostat.
- Extending the life of the Air Conditioning unit.

Projected Bill Savings

Current Usage and Charges			New Energy Efficiency Program (AC Tune-Up)			
Customer Type (with A/C Load)	Monthly Energy (kWh)	Current Bill (\$/Month)	FY 15/16 Monthly Bill with AC Tune-Up	FY15/16 Max Monthly Bill Savings	FY 19/20 Monthly Bill with AC Tune-Up	FY19/20 Max Monthly Bill Savings
Low User	700	\$ 108.15	\$ 94.14	\$ 14.01	\$ 111.49	\$ 17.59
Medium User	1,200	\$ 195.55	\$ 166.90	\$ 28.65	\$ 200.58	\$ 35.98
High User	1,500	\$ 247.99	\$ 210.40	\$ 37.60	\$ 253.83	\$ 47.21

Notes:

Assumes basic usage is 350kWh (low) 500 kWh (medium) and 600 kWh (high) and remainder is AC related

Use 30 % energy reduction on energy above base usage to derive savings

In addition to the proposed AC Tune-Up program, LADWP offers a Pool Pump rebate program to assist customers in further lowering their home's energy costs. This will provide additional bill savings when combined with the proposed Air Conditioning Performance Program.

LADWP's Pool Pump Replacement Program – Potential Energy and Cost Savings

LADWP customers with pools can also qualify for LADWP's pool pump replacement program. Below is the analysis of monthly savings from replacing a single speed pool pump to a more efficient multi-speed or variable speed pump.

Pool Pump Replacement Program		
Replace Single-Speed Pump to:	LADWP Rebate Offer	Monthly Bill Savings
Multi-Speed	\$ 500.00	\$ 22.26
Variable Speed	\$ 1,000.00	\$ 32.83

In Conclusion

The proposed Air Conditioning Performance Program can assist LADWP customers in lowering their monthly bills by \$5.34-\$27.85 per month. Additionally, LADWP offers a Pool Pump rebate program that can assist customers in further lowering their homes energy costs by an additional \$22.36-\$32.83 per month. These LADWP Energy

Efficiency programs not only help lower customer's energy bills, but it also contributes in reduced carbon emissions leading Los Angeles' energy demands to a more sustainable future.

It should also be noted that through energy efficiency solutions and increased customer interest in distributed generation (solar), customers can continue to mitigate these and other impacts to their bills. These resources can be easily accessed online through www.myladwp.com or by contacting the LADWP's Customer Contact Center at 1-800-DIAL-DWP (1-800-342-5397).

Please do not hesitate to contact me at (213) 367-1338. For any technical questions or if additional information is required, please contact Mr. Neil M. Guglielmo, Director of Budget, Rates, and Financial Planning, at (213) 367-5163.

Sincerely,


Marcie L. Edwards
General Manager

JLP/NMG:ap
Enclosures

c/enc: Councilmember Bob Blumenfield, Vice Chair, Energy and Environment
Committee

Councilmember Mitch O'Farrell, Energy and Environment Committee

Councilmember Gilbert Cedillo, Energy and Environment Committee

Councilmember Paul Koretz, Energy and Environment Committee

Frederick H. Pickel, Ph. D, Rate Payer Advocate, City of Los Angeles

Mr. Ron Galperin, City Controller

Ms. Sharon Tso, Chief Legislative Analyst

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