

**In 2015, LADWP was under a number of pressures and had to create a new rate structure that would respond to those pressures.**

## **The pressures were:**

- **California's Renewable Portfolio Standard (RPS), which was established in 2002 by Senate Bill (SB) 1078 (Sher, 2002) with the initial requirement that 20% of energy retail sales must be served by renewable resources by 2017. The program was accelerated in 2015 with SB350 (De Leon 2015) which mandated a 50% RPS by 2030.**
- **The City of LA's requirement that the utility be totally coal-free by 2025, which had been passed in 2013. That meant replacing 46% of their energy resources.**
- **Demand from low-income communities that already severe energy burdens not be increased.**

# The 2015 LADWP Rate Case was the response to these pressures.

They clearly had to raise a large amount from their ratepayers while assuaging the concerns of the very well-organized residents in low-income neighborhoods.

The tiered rate structure we'll explore wasn't enough to satisfy those residents. They also had to raise their energy efficiency budget by 50%.

And that would require them to bring in even more money.

Just like in Tennessee, the laws governing utility rates would not allow them to give a special rate to poor people.

LADWP's very successful program of low-income energy efficiency upgrades provided them the opportunity to get broad public approval for the 2015 Rate Case.

But if energy efficiency works, it will also reduce the utility's income from usage fees.

So, similar to KUB, LADWP introduced a fixed fee to assure they would meet fixed costs. And of course, with an expanding net metering program for rooftop solar and the obligation to build out a vast system of utility-scale renewable resources, those fixed costs would be rapidly increasing.

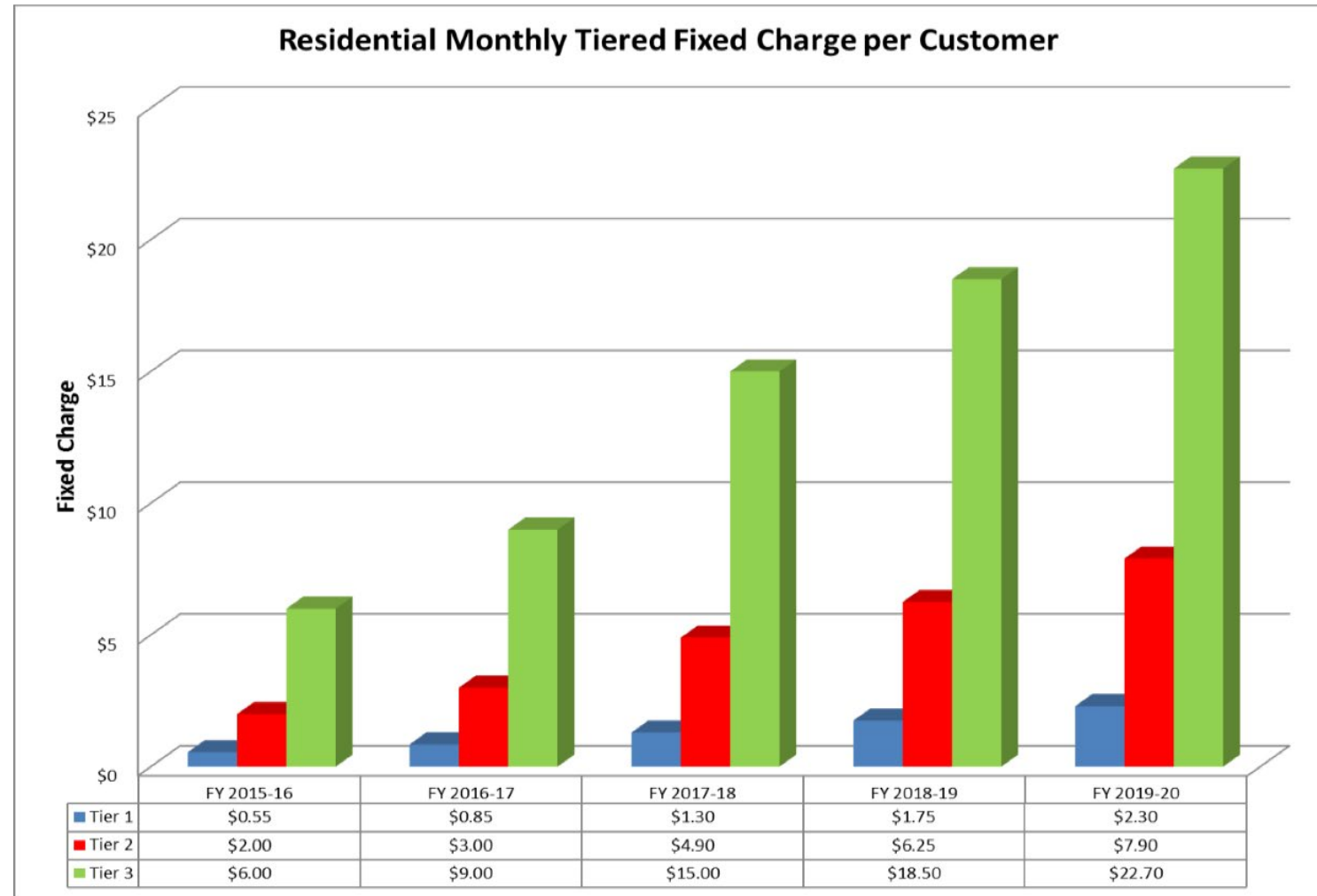
But to avoid unduly burdening LA's low-income communities, they created a tiered fixed fee – the amount based on consumption.

Let's see how it works.

# Proposed Changes to LADWP Residential Rate Design

- LADWP proposes to implement a tiered fixed charge for Residential customers.
- The proposed fixed charge would be tied to the customer's usage, based on the higher of maximum monthly usage from the grid in the prior year or maximum monthly usage of electricity delivered to the grid in the prior year, as the capacity of the grid is designed based on the peak or maximum expected usage level.
- As more customers generate a portion of their energy needs, a utility's financial survival requires rate design mechanisms to change to ensure all customers continue to contribute to the basic fixed costs of providing electric service.

While customer usage will always vary, all customers should bear some of the burden of the distribution infrastructure costs.



## **The tiered fixed charge approach has several benefits, including, but not limited to:**

- Ensuring the continuation of the same level of reliability for all customers;
- Encouraging increased energy efficiency measures by linking the three-tiered fixed charge to customer usage levels, as opposed to a single rate for all customers;
- Better matching of cost recovery and cost causation as determined through the new marginal cost of service study;
- Movement toward matching the level of fixed and variable costs with revenue from fixed and usage-based rate elements; and
- Minimizing the percentage rate increase for low usage customers or eliminating the impact on low usage customers as the fixed charge is not expected to exceed the current minimum usage charge.

# Usage rates are tiered in the same way as fixed fees.

- LADWP's rate design encourages energy conservation. In order to send the proper conservation price signals to customers, electricity rates increase as consumption increases. This approach is consistent with the marginal costs to serve these customers, as well. Therefore, the proposed rate design allocates more of the rate increase to customers that consume higher levels of electricity, and customers at lower consumption levels receive lower relative rate increases.
- The average annual five-year rate increases proposed for each tier are: 2.4% for tier 1, 5.1% for tier 2 and 7.5% for tier 3 (for summer), respectively.



Proposed Thresholds for Residential Tiered Fixed Charge  
Zone 1 Monthly Usage (kWh) Zone 2 Monthly Usage (kWh)

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**Zone 1**

**Zone 2**

<b>Tier 1</b>	$0 \leq \text{and} \leq 350$	$0 \leq \text{and} \leq 500$
<b>Tier 2</b>	$350 < \text{and} \leq 1050$	$500 < \text{and} \leq 1500$
<b>Tier 3</b>	$> 1050$	$> 1500$

Now we'll see the fees and rates arranged in one chart clearly indicating the incentive for conservation and efficiency.

<b>Tiers</b>	<b>Monthly Zone 1 Usage Allocation (kWh)</b>	<b>Monthly Zone 2 Usage Allocation (kWh)</b>	<b>Monthly Tiered Fixed Charge (\$)</b>	<b>Summer Energy Charge (\$/kWh)</b>	<b>Winter Energy Charge (\$/kWh)</b>
<b>FY 2015-16</b>					
<b>Tier 1</b>	0 ≤ and ≤ 350	0 ≤ and ≤ 500	\$0.55	\$0.1494	\$0.1494
<b>Tier 2</b>	350 < and ≤1050	500 < and ≤1500	\$2.00	\$0.1816	\$0.1816
<b>Tier 3</b>	> 1050	> 1500	\$6.00	\$0.2305	\$0.1816
<b>FY 2016-17</b>					
<b>Tier 1</b>	0 ≤ and ≤ 350	0 ≤ and ≤ 500	\$0.85	\$0.1524	\$0.1524
<b>Tier 2</b>	350 < and ≤1050	500 < and ≤1500	\$3.00	\$0.1877	\$0.1877
<b>Tier 3</b>	> 1050	> 1500	\$9.00	\$0.2435	\$0.1877
<b>FY 2017-18</b>					
<b>Tier 1</b>	0 ≤ and ≤ 350	0 ≤ and ≤ 500	\$1.30	\$0.1577	\$0.1577
<b>Tier 2</b>	350 < and ≤1050	500 < and ≤1500	\$4.90	\$0.1980	\$0.1980
<b>Tier 3</b>	> 1050	> 1500	\$15.00	\$0.2659	\$0.1980
<b>FY 2018-19</b>					
<b>Tier 1</b>	0 ≤ and ≤ 350	0 ≤ and ≤ 500	\$1.75	\$0.1606	\$0.1606
<b>Tier 2</b>	350 < and ≤1050	500 < and ≤1500	\$6.25	\$0.2089	\$0.2089
<b>Tier 3</b>	> 1050	> 1500	\$18.50	\$0.2850	\$0.2089
<b>FY 2019-20</b>					
<b>Tier 1</b>	0 ≤ and ≤ 350	0 ≤ and ≤ 500	\$2.30	\$0.1640	\$0.1640
<b>Tier 2</b>	350 < and ≤1050	500 < and ≤1500	\$7.90	\$0.2226	\$0.2226
<b>Tier 3</b>	> 1050	> 1500	\$22.70	\$0.3096	\$0.2226

- LADWP's proposed monthly tiered fixed charge coupled with increases in the energy rate by tier is equitable and balanced. By assigning a proportionally higher fixed charge to higher usage customers, low usage customers who may not benefit from or be able to afford customer-owned solar are not unduly impacted. LADWP's tiered fixed charge comprises a lower percentage of customers' monthly bills at lower usage levels than if a single fixed charge across all customers was used.
- LADWP's proposed balance of fixed charges and energy charges is competitive, but still provides an incentive for customer-installed generation.

In preparing this presentation, I conferred with David Rahimian and George Chen of LADWP. David is in charge of Legislative and Intergovernmental Affairs and George is the Power System Rates Manager. We discussed LADWP's 2015 Rate Case which presented a rate increase to be phased in over 5 years between 2015 and 2020. In addition to a tiered system of usage rates, the utility combined a system of tiered fixed charges as well. As shown in the previous sections taken from the rate case, this combined system was designed to provide for the costs of reliability upgrades while at the same time incentivizing conservation and efficiency. An additional purpose was to relieve burdens on low-income customers who could not afford rooftop solar so they wouldn't foot the costs of their neighbors' solar installations.

As we ended our conversation, I asked David and George three questions:

1. In 2015, LADWP set a goal for a 15% reduction in electricity demand by 2020. Did they achieve that?

Yes. In 2011, average residential energy consumption was 500 KWh. Now it's 410 KWh.

2. Did the rate structure unduly impact poor people?

As far as we can tell, no. There's been no increase in LIHEAP applications in 6 years.

3. Did this rate structure hold up over time? Is it still in place?

Yes. There have been incremental adjustments to rates, but the structure is still the same.

The rate structure takes care to assure the recovery of fixed costs. With an aggressive EE program, they foresaw the likelihood of decreased revenue from usage.

In 2002, California Senate Bill 1078 established the RPS program, requiring 20% renewable energy by 2017. By 2010, they had already achieved that goal. So they set a new goal of 33% by 2020. The RPS has been regularly increased as each goal is met. Late last year, the LA City Council voted to have LADWP transition to 100% renewable energy by 2035. That's a decade earlier than LA's previous goal. The vote followed the publication and dissemination of a study by NREL and LADWP called LA 100, exploring various means to get to 100% renewable energy. Today we'll explore the rate design that will help LA achieve this latest goal.