Department of Water and Power
City of Los Angeles

PROPOSED RATE RESTRUCTURING

RATE RESTRUCTURING OBJECTIVES

- Provide accurate price signals that give customers an incentive to use electricity in an efficient manner
- Reinforce Our strategy on renewable resources, and environmental stewardship
- Encourage customers to make efficient choices regarding alternative energy sources including self-generation (e.g., solar)
- Design Rates to be Revenue Neutral with existing Rate Structure.

SUMMARY OF KEY RATE RESTRUCTURING CHANGES

Commercial Rates

- Time-of-Use Pricing based on Marginal Costs (*Enhances Renewable Technology Payback Period)
- Rate Schedules based on Voltage Level
- Revised Billing Seasons
- Mandatory Time-of-Use for Demands above 30 kW Improved Demand Response
- New Transmission Rate

Other

- Net Metering (*Added Low Income Customers, Supported by Environmental Community)
- Revised Customer Generation Rate (*Negotiated with Refineries, Community Colleges and other CG Customers)
- New AMP Rate (*Supports Electrification of POLA)

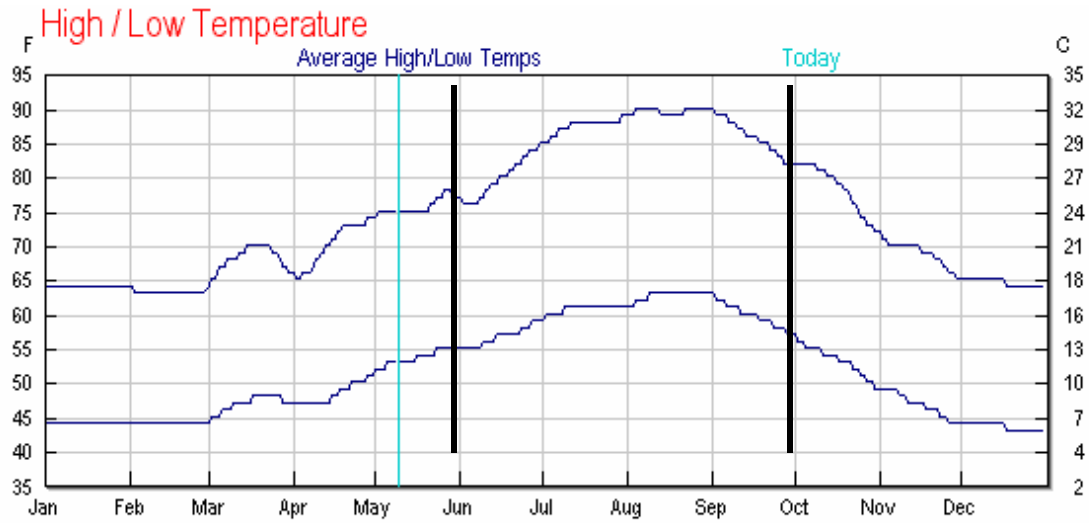
Residential Rates:

- Residential Tiered Rates with Temperature Zones and Baseline Allocations (*Based on Scientific Study)
- No service charges in Tiered Rate structure
- Billing Seasons added to Residential Rates
- Mandatory Time-of-Use for monthly energy use of 3,000 kWh or greater

PROPOSED MODIFICATIONS
REVISED BILLING SEASONS

	Old Season	New Season
Winter Season	November through May (7-months)	October through May (8-months)
Summer Season	June through October (5-months)	June through September (4-months)

- Billing Seasons have been revised from 7 Winter and 5 Summer months to 8 Winter and 4 Summer months
- This revision brings the Billing Seasons in-line with Summer Months that produces the highest energy demand on the Department's system



RESIDENTIAL RATES RESTRUCTURING

- Tier 1 customers will see virtually no change in their bi-monthly electric bills with seasonal variation is almost negligible

- The new rates add seasonal variation and increases as energy consumption increases

- Customers who want to avoid higher charges during the Summer can switch to the TOU rate or install Renewable or Energy Efficiency

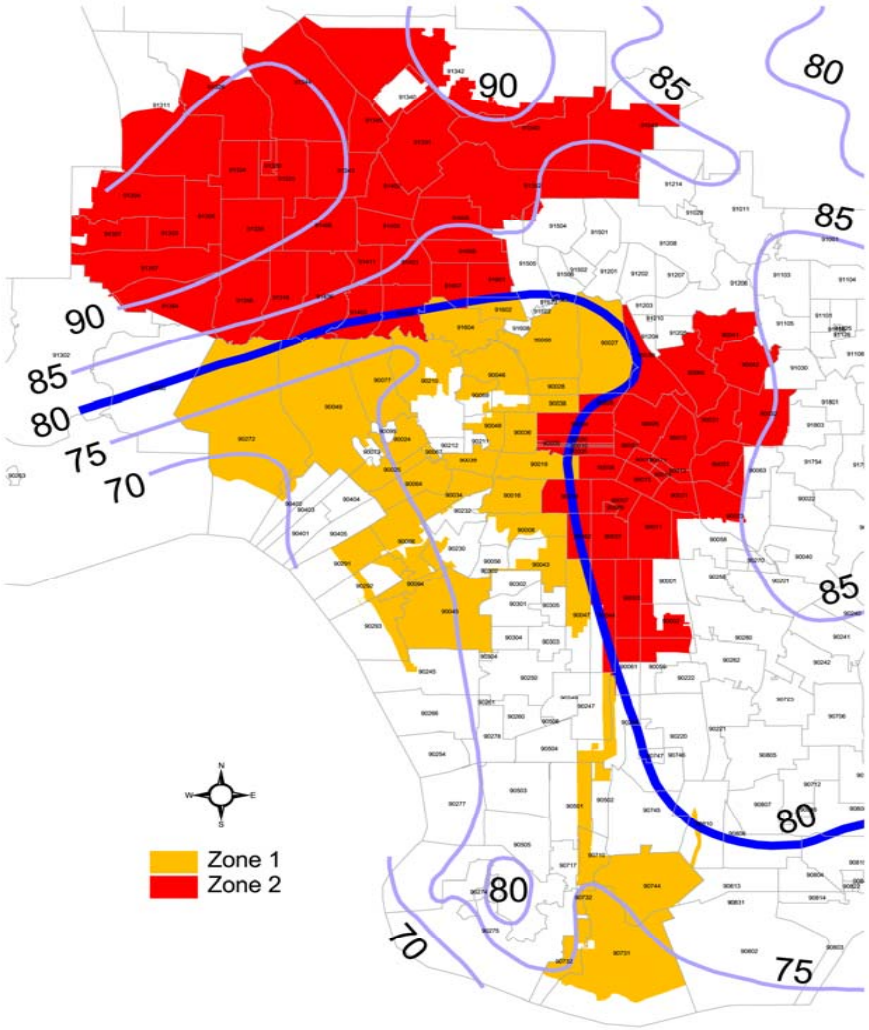
ELECTRIC RATE RESTRUCTURING
COUNCIL ACTION

- Specific, changes that were made to the original electric power residential rate restructure package include:
  - Use of a scientific study that maps summer average daily temperatures for the microclimates of the City of Los Angeles. This study was performed by the Department of Atmospheric Sciences of the University of California, Los Angeles.
  - Modified rates in the tiers based on the revised geographic areas and to ensure that there are no subsidies between the two geographic zones.
  - Established a mandatory time of use (TOU) rate for any residential customer consuming greater than 3,000 kwh per month. This consumption level is roughly 6 times the average LADWP residential customer.

TIERED RATES AND TEMPERATURE ZONES

UCLA SCIENTIFIC STUDY

- This study maps summer average daily temperatures for the microclimates of the City of Los Angeles and was performed by the Department of Atmospheric Sciences at UCLA.
- The two temperature zones were based on average temperatures less or greater than 80 degrees
- An entire ZIP Code area was included in the warmer temperature zone whenever 51 percent or more of either the land or single-family customers within the ZIP Code appear to be in the warmer temperature zone.
- The ZIP Code approach is the most feasible method of implementing the temperature zones with LADWP's customer information system.

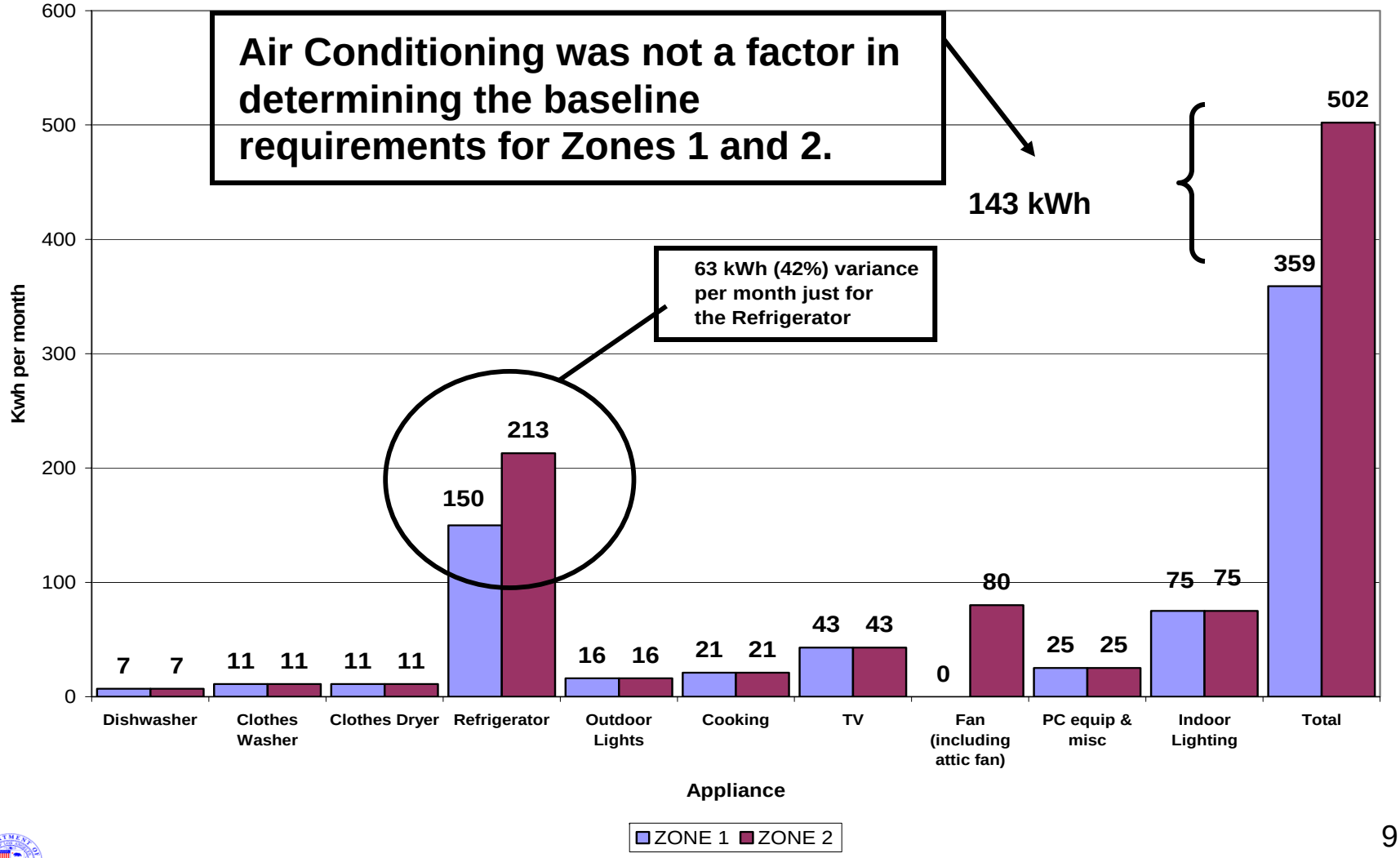


TIERED RATES AND TEMPERATURE ZONES

TEMPERATURE ZONE BASELINE ALLOCATIONS

- The Baseline Allocation is a quantity of electricity necessary for the reasonable energy needs of the average residential customer in each temperature zone.
- In the proposed rate structure Zone 1 and Zone 2 have monthly Baseline Allocations of 350 kWh and 500 kWh respectively.
- Reasonable energy needs include basic household appliances such as refrigerators, TV's, ceiling fans and lighting.
- With a temperature variance of 15 degrees, the overall energy consumption of these basic household appliances can be increased by approximately 143 kilowatt-hours with the main drivers for this variance being the refrigerator and cooling (fan) as shown in the chart on the next page.

Typical Energy Usage in Different Geographical Zones within the City of Los Angeles During Summer Months



TIERED RATES AND TEMPERATURE ZONES

TEMPERATURE ZONE BASELINE ALLOCATIONS

- The tiered structure consists of two temperature zones and three tiers for each temperature zone.
  - Tier 1 represents 100 percent of the Baseline Allocation of electricity consumption for the temperature zone.
  - Tier 2 represents 101 percent to 300 percent of the baseline electricity consumption.
  - Tier 3 is based on all consumption above 300 percent of the baseline allocation.

	Temperature Zone		
	Zone 1	**Zone 2**	**Electrical consumption as a % of Baseline Allocation**
Tier 1	first 350 kWh	first 500 kWh	0% to 100%
Tier 2	next 700 kWh	next 1000 kWh	101% to 300%
Tier 3	greater than 1050 kWh	greater than 1500 kWh	above 300%

TIERED RATES AND TEMPERATURE ZONES

ENSURE NO SUBSIDIES BETWEEN THE TWO GEOGRAPHIC ZONES

- The chart below shows the breakdown of average residential electricity consumption and energy charges between the two temperature zones.
- The restructured rates are revenue neutral, so no additional revenue is collected within the tiered rate structure
- These restructured rates are designed such that the average overall rate paid between each temperature is virtually the same at 11.7 cents per kilowatt-hour

Temperature Zone	Zone 1				Zone 2			
Annualized Calculation	**Tier 1**	**Tier 2**	**Tier 3**	**Total**	**Tier 1**	**Tier 2**	**Tier 3**	**Total**
No. of Customers	274,876	192,410	34,786	502,071	447,754	257,247	39,274	744,275
Each Tier%	55%	38%	7%		60%	35%	5%	
Avg. Consumption	216	569	1,662	456	305	717	1,253	497
Avg. Monthly Bill	$ 25.06	$ 67.19	$ 206.20	$ 53.76	$ 35.42	$ 84.31	$ 149.15	$ 58.32
Cents/kWh (July 2008)	0.1161	0.1180	0.1241	0.1178	0.1161	0.1176	0.1191	0.1172
Delta	0.0006							

SUMMARY OF KEY RATE RESTRUCTURING CHANGES

- The chart below shows the average rate a residential customer will pay by tier effective July 2009.

BILLING DETERMINANT	TIER 1	TIER 2	TIER 3
ENERGY CHARGE	$ 0.0702	$ 0.0852	$ 0.1200
ECA	$ 0.0489	$ 0.0489	$ 0.0489
RCA	$ 0.0030	$ 0.0030	$ 0.0030
ESA	$ 0.0015	$ 0.0015	$ 0.0015
TOTAL RATE	**$ 0.1236**	**$ 0.1386**	**$ 0.1734**

COMMERCIAL RATES RESTRUCTURING

- Seasonal variation has increased for all Commercial Customers Classes
  - Small (less than 30kW)
  - Primary (4,8kV with demand greater than 30kW)
  - Sub Transmission (34.5kV with demand greater than 30kW)
- Lower Winter Season Revenue results from no Demand Charges and Lower Energy Charges
- Demand Charges and Higher High Peak Energy Charges drive Higher Summer Charges
- Almost no variation in the new rates for the Winter Period

COMMERCIAL RATES RESTRUCTURING

SCHEDULE A1 - SMALL GENERAL SERVICE (DEMAND LESS THAN 30kW)

	EXISTING		PROPOSED	
	High Season	Low Season	High Season	Low Season
	None	None	June - Sep.	Oct. - May
a. Rate A				
1 Service Charge	$ 4.00	$ 4.00	$ 6.50	$ 6.50
2 Facilities Charge	$ 2.25	$ 2.25	$ 5.00	$ 5.00
3 Energy Charge - per kWh	$ 0.06794	$ 0.06794	$ 0.06558	$ 0.04268
b. Rate B - Time-of-Use				
1 Service Charge	$ 7.00	$ 7.00	$ 15.00	$ 15.00
2 Facilities Charge	$ 2.25	$ 2.25	$ 5.00	$ 5.00
3 Energy Charge - per kWh				
High Peak Period	$ 0.15194	$ 0.15194	$ 0.16385	$ 0.05854
Low Peak Period	$ 0.08487	$ 0.08487	$ 0.10256	$ 0.05854
Base Period	$ 0.03393	$ 0.03393	$ 0.03122	$ 0.03122

ECA, ESA & RCA PER GENERAL PROVISIONS

COMMERCIAL RATES RESTRUCTURING

SCHEDULE A2 - SERVICE FROM PRIMARY (4.8KV) SYSTEM

	EXISTING		PROPOSED	
	High Season	Low Season	High Season	Low Season
	June - Sep.	Oct. - May	June - Sep.	Oct. - May
a. Rate A - Standard Service				
1 Service Charge	$ 25.00	$ 25.00	$ 25.00	$ 25.00
2 Facilities Charge	$ 2.25	$ 2.25	$ 5.00	$ 5.00
3 Demand Charge - per kW	$ 13.78	$ 12.62	$ 9.00	$ 5.50
4 Energy Charge - per kWh	$ 0.02181	$ 0.02181	$ 0.03645	$ 0.02995
b. Rate B - Time-of-Use				
1 Service Charge	$ 25.00	$ 25.00	$ 28.00	$ 28.00
2 Facilities Charge	$ 2.25	$ 2.25	$ 5.00	$ 5.00
3 Demand Charge - per kW				
High Peak Period	$ 8.63	$ 7.90	$ 9.00	$ 4.25
Low Peak Period	$ 4.21	$ 3.85	$ 3.25	$ -
Base Period	$ 1.40	$ 1.40	$ -	$ -
4 Energy Charge - per kWh				
High Peak Period	$ 0.02949	$ 0.02949	$ 0.04679	$ 0.04045
Low Peak Period	$ 0.02907	$ 0.02907	$ 0.03952	$ 0.04045
Base Period	$ 0.01658	$ 0.01658	$ 0.01879	$ 0.02252

ECA, ESA & RCA PER GENERAL PROVISIONS

COMMERCIAL RATES RESTRUCTURING

SCHEDULE A3 - SERVICE FROM SUBTRANSMISSION (34.5kV) SYSTEM

	EXISTING		PROPOSED	
	High Season	**Low Season**	**High Season**	**Low Season**
	June - Sep.	**Oct. - May**	**June - Sep.**	**Oct. - May**
a. Rate A - Subtransmission Service				
1 Service Charge	$ 50.00	$ 50.00	$ 75.00	$ 75.00
2 Facilities Charge	$ 1.65	$ 1.65	$ 4.00	$ 4.00
3 Demand Charge - per kW				
High Peak Period	$ 8.52	$ 7.80	$ 9.00	$ 4.00
Low Peak Period	$ 4.10	$ 3.76	$ 3.00	$ -
Base Period	$ 0.80	$ 0.80	$ -	$ -
4 Energy Charge - per kWh				
High Peak Period	$ 0.02800	$ 0.02800	$ 0.04390	$ 0.03863
Low Peak Period	$ 0.02772	$ 0.02772	$ 0.03764	$ 0.03863
Base Period	$ 0.01585	$ 0.01585	$ 0.01755	$ 0.02197
9 Reactive Energy Charge	Not Shown	Not Shown	Not Shown	Not Shown

ECA, ESA & RCA PER GENERAL PROVISIONS

PROPOSED MODIFICATIONS

REVISIONS FOR PHOTOVOLTAICS AND NET METERING

- Net Metering Customers on Time-of-Use may apply the retail rate cash value (for excess energy generated) to their current Electric Bill and carry over excess credit to future bills
- Credits may be used to offset minimum bill for Time-of-Use Net Metering Customers
- The LADWP Net Metering Rate is structured similar to Local IOU's
- LADWP will allow customers to maintain credits until service as terminated as opposed to an annual reset

PROPOSED WATER RATE TECHNICAL ADJUSTMENTS

PROPOSED WATER RATE ACTIONS

- **Low Income/Lifeline Subsidy**
  - Increase subsidies by the degree of water supply shortage.
- **Medical Use Allocations**
  - Provide additional Tier 1 allocations for individuals that use water for special medical equipment.
- **Council Review Time for Shortage Year Rates**
  - Modify review time from 15 days to 30 days.
- **Technical Adjustment for Tier 2 Rate**
  - Fully include the Water Procurement Adjustment (WPA) in the Tier 2 Water Rates.
- **Horse Allocations**
  - Provide additional Tier 1 allocations for horses.

Low Income/Lifeline Subsidy

- Increase the subsidies for Low Income and Lifeline customers by the degree of water shortage (15% increase in the subsidies for the current declared shortage).

Medical Use Allocations

- Tier 1 shortage year allocation increases for individuals that need additional water for special medical equipment, such as dialysis.
- Verification of need for medical equipment by a doctor will be required.
- Computations will be based on the manufacturer's specifications for the special medical equipment and the prescription for use provided by the customer.
- Increased allocation not to exceed customer's normal allocation.

Council Review Time for Shortage Year Rates

- Modify review time for Mayor and City Council from 15 days to 30 days for decisions regarding Shortage Year Rates.
- Allows time to request and receive additional information and reports.

Technical Adjustment for Tier 2 Rate

- Fully include the Water Procurement Adjustment (WPA) in the Tier 2 Rates as it is done in the Tier 1 Rates.
- This technical adjustment wll be revenue neutral to the base rate revenues for the water rate action approved April, 2008.
- Tier 2 Rate will be WPA plus current high season Tier 2 Base Rate less $0.94.

Horse Allocations

- Tier 1 Shortage Year allocation increase for horses and other livestock 500 pounds or more.
- Horses must be registered with Animal Services and customer's property must be zoned for horses.
- 748 gallons/month (1 HCF) Tier 1 additional allotment for each horse. Maximum of five horses/livestock.
- Increased allocation not to exceed customer's normal allocation.