

### LADWP RATES AND EQUITY METRICS

Board Presentation March 7, 2017



### Introduction

#### **RATES METRICS**

 Pursuant to Section 4 of the Water and Electric Rates Ordinances, the Department shall provide a written report to the Board of Water and Power Commissioners (Board) on a semi-annual basis, commencing 2017. This report shall include, but not be limited to, the rates metrics being monitored, the results for each metric, the target, the variance of actual performance from the target, and the proposed mitigation plan to address a variance, if necessary.

#### **EQUITY METRICS**

 On December 6, 2016, the Board approved Resolution No. 017107 finalizing the list of Equity Metrics for LADWP's Equity Metrics Data Initiative (EMDI). The Department will report Equity Metrics to the Board on a semi-annual basis coinciding with Rates Metrics reporting to the Board.





### LADWP RATES METRICS

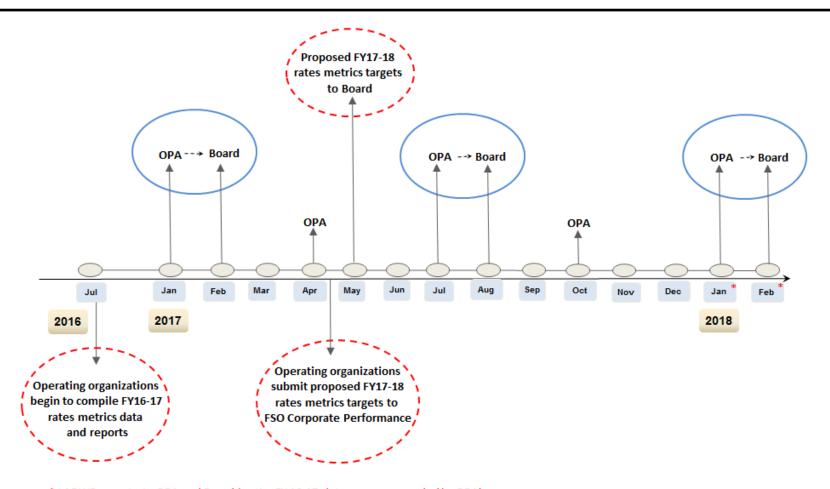


### **Background**

LADWP in concert with the Mayor, City Council, Board of Water and Power Commissioners, and Office of Public Accountability (OPA) developed enhanced reporting requirements that will improve LADWP's performance, accountability, and transparency. In January 2016, the Board adopted the rates metrics targets for fiscal year 2016 – 2017.

- Require the LADWP to report quarterly on specific and well-defined key performance metrics to the OPA and semiannually to the Board;
- Provide the Board with ability to add, delete or further modify these key performance metrics, including the specific targets, variance ranges, and any proposed mitigation plans; and,
- Provide the Board, OPA, and Energy and Environment Committee with reported key performance data from which progress can be measured.

## **LADWP Rates Metrics Reporting Timeline**



<sup>\*</sup> LADWP reports to OPA and Board (entire FY 16-17 data as recommended by OPA)

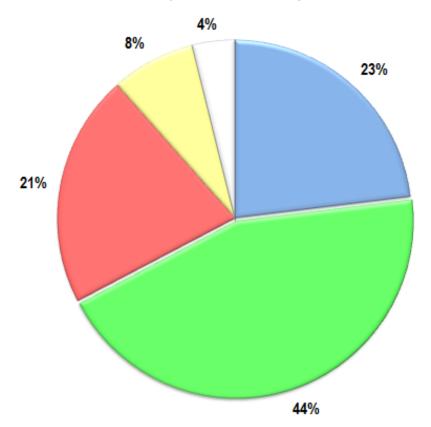


## **Actions Taken for Rates Metrics Reporting**

- Standardize rates metrics reporting format with a onepage dashboard
- Track rates metrics data on a monthly basis
- Assign Responsible Manager(s) for each of the rates metrics
- Conduct regular rates metrics review meetings by operating organizations
- Obtain feedback from OPA

# Rates Metrics Status Summary (Overall)

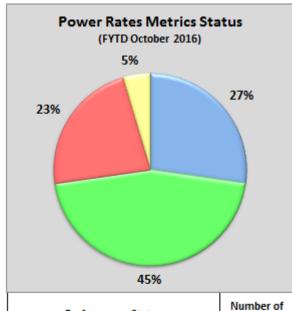
#### LADWP Rates Metrics Status (FYTD October 2016)



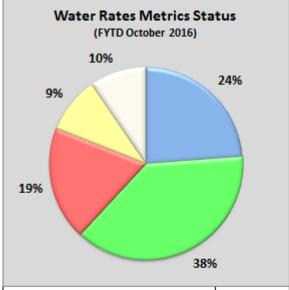
LADWP Rates Metrics Status (FYTD October 2016)				
Performance Statu	JS	# Metrics		
Exceeds Target	Blue	12		
Within Acceptable Variance	Green	23		
Outside Acceptable Variance	Red	11		
Needs Attention	Yellow	4		
Information Only	White	2		
Total		52		



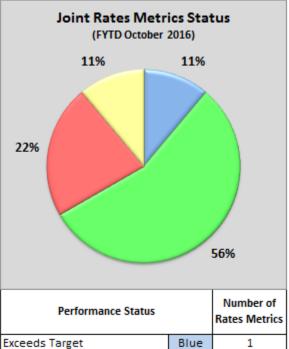
# Rates Metrics Status Summary (By System)



Performance Status	Number of Rates Metrics	
Exceeds Target	Blue	6
Within Acceptable Variance	Green	10
Outside Acceptable Variance	Red	5
Needs Attention	Yellow	1
Information Only	White	0
	Total	22



Performance Status	Number of Rates Metrics	
Exceeds Target	Blue	5
Within Acceptable Variance	Green	8
Outside Acceptable Variance	Red	4
Needs Attention	Yellow	2
Information Only	White	2
	Total	21



Performance Status	Number of Rates Metrics	
Exceeds Target	Blue	1
Within Acceptable Variance	Green	5
Outside Acceptable Variance	Red	2
Needs Attention	Yellow	1
Information Only	White	0
	Total	9



# **Sample Summary Report**

Related Rate Adjustment Factor	Category	#	Board Metric	Definition	FY 16/17 Target	Acceptable Variance	Responsible Manager	October 2016 Performance
	Repowering/Once Through Cooling	1	Repowering/Once Through Cooling budget vs. actual (\$M)	Board Approved Estimated Project Cost vs. Actual project costs	FY16-17 Board Approved Budget - May 2016	+/- 15%	Sungly Chiu	0.4%
Power (None)	Repowering/Once Through Cooling	2	Once Through Cooling project milestones against compliance deadlines	Plant actual compliance dates against plan	OTC Compliance Date: Scattergood Unit 1&2: 2024 Haynes Unit 1&2: 2029 Harbor Unit 1&2: 2029 Haynes Unit 8: 2029	+/- 45 days	Sungly Chiu	+ 14 Days
	Power System Training Plan		Average cost of Power System Training Plan per trainee	Average cost of training for Electric Distribution Mechanic Technician (EDMT) and Electrical Mechanic Technician (EMT) classifications per trainee that graduates from respective training program	Begin reporting in 2018	Begin reporting in 2018; +/- XX%	Brian Wilbur	NA
Reliability Cost Adjustment Factor	Power System Training Plan	3	Number of trainee graduates against Power System Training Plan	Number of Electric Distribution Mechanic Technician (EDMT) trainees that graduate from each respective training program against the annual training plan	EDMT: 36	+/- 15%	Brian Wilbur	-12.5%
	Power System Training Plan	4	Number of trainee graduates against Power System Training Plan	Number of Electrical Mechanic Technician (EMT) trainees that graduate from each respective training program against the annual training plan	EMT: 0	+/- 15%	Brian Wilbur	0.0%
	Renewable Portfolio Standard (Owned)	5	Total Renewable Portfolio Standard (RPS) Ratio (%)	GWh from RPS plants/GWh for all customers (State requirement)	25% RPS for Calendar Year 2016	+/- 3% of each canlendar year's goal toward state law mandates	Hamid Nejad & Brad Packer	4.5%
	Renewable Portfolio Standard (Owned)	6	Total RPS cost (\$/MWh) vs. plan, by technology (Wind)	Total RPS purchased power cost (S/MWh) as compared to plan, by technology	Wind: \$79.35/MWh	+/- 15%	Bill Engels, Sam Mannan & Jimmy Lin	-8.6%
Energy Cost Adjustment Factor	Renewable Portfolio Standard (Owned)	7	Total RPS cost (\$/MWh) vs. plan, by technology (Solar)	Total RPS purchased power cost (\$/MWh) as compared to plan, by technology	Solar: \$94.31/MWh	+/- 15%	Bill Engels, Sam Mannan & Jimmy Lin	-18.5%
	Renewable Portfolio Standard (Owned)	8	Total RPS cost (\$/MWh) vs. plan, by technology (Geothermal)	Total RPS purchased power cost (\$/MWh) as compared to plan, by technology	Geothermal: \$84.76/MWh	+/- 15%	Bill Engels, Sam Mannan & Jimmy Lin	-3.3%
	Renewable Portfolio Standard (Owned)	9	Total RPS cost (\$/MWh) vs. plan, by technology (Biogas)	Total RPS purchased power cost (S/MWh) as compared to plan, by technology	Biogas: \$80.57/MWh	+/- 15%	Bill Engels, Sam Mannan & Jimmy Lin	0.0%
Energy Cost Adjustment Factor	Renewable Portfolio Standard (Purchased)	10	Average levelized cost of energy of purchased power agreements (PPAs) signed during the previous fiscal year	Cost per MWh for all PPAs	\$66.35/MWh	+/- 15%	Bill Engels, Sam Mannan & Randy Krager	-16.6%



### **Sample Dashboard Reports**

#### LADWP RATES METRIC - Pole Replacement (Power)

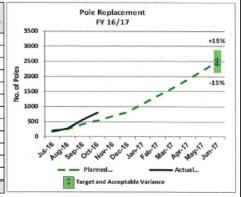
RESPONSIBLE MANAGER: Bill Herriott, Power Transmission and Distribution

REPORTING PERIOD: October 2016

DEFINITION OF RATES METRIC: Number of Poles Replaced Against Plan

TARGET & ACCEPTABLE VARIANCE (FY 16/17): Target = 2,500; Acceptable Variance = ± 15%

STATUS:	Exc	eeds Targe	et		
FYTD as of:	Planned	Actual	Var	iance	Re-Estimate
	(No.)	(No.)	No.	%	(If Applicable)
Jul-16	208	167	-41	-19.8%	
Aug-16	250	271	21	8.4%	
Sep-16	403	549	146	36.2%	
Oct-16	534	788	254	47.6%	
Nov-16	675				960
Dec-16	822				1,221
Jan-17	1,072				1,482
Feb-17	1,347				1,743
Mar-17	1,607				2,003
Apr-17	1,900				2,264
May-17	2,200				2,544
Jun-17	2,500				2,787
	Acceptab	le Variance		15%	11.5%



SOURCE OF DATA: Jobs P6322/O3610/X3054 (KPI # 04.01.01.03)

#### 1. BACKGROUND / PURPOSE

 Replace 2,500 deteriorated poles due to age or other damage. The overhead power system has approximately 321,000 poles in its system. These poles have an average life span of fifty years; they are designed to sustain our infrastructure and to address LADWP pole replacement backlog. These poles' primary function is to support various sizes of transformers, various range and types of underground cables transitioning from the underground to an overhead termination and related equipment, communication cables, a range of size and type of crossarms. These crossarms support various sizes of conductors at different voltage levels, various type of equipment such as transformers, switches, light fixtures, etc. Work is done by Distribution Construction & Maintenance (DC&M) district crews and contract crews. This work is to maintain compliance with California Public Utilities Commission (CPUC) General Order 165- Inspection Cycles for Electric Distribution Facilities, also related to Power System Reliability Program (PSRP). Poles are identified through the DC&M aggressive Inspection

#### 2. ACHIEVEMENTS / MILESTONES MET

 To date, the target was to replace 534 poles and the current actual number of poles replaced is 788.

#### 3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- Although the actual number of poles replaced exceeds the 15% threshold set for the monthly target, this KPI is in good standing.
- There were construction work packages which had multiple pole replacements written in the job. Some of these jobs were completed in WMIS, which had attributed to the spike in pole replacements for the month.

#### 4. MITIGATION PLAN AND / OR RECOMMENDATIONS

 Some of the work performed in this metric is incident driven and will continue after goals are met. However, upon meeting the fiscal year end goal, crews will be reassigned to other PSRP priority work, such as 4.8kV feeders and 34.5kV trunk lines.

### **Sample Dashboard Reports**

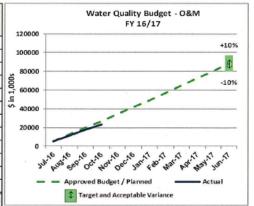
### LADWP RATES METRIC – WATER QUALITY BUDGET VS ACTUAL-0&M (Water)

RESPONSIBLE MANAGER: Anselmo Collins REPORTING PERIOD: October 2016

DEFINITION OF RATES METRIC: Board approved annual budget vs actual expenditures.

TARGET & ACCEPTABLE VARIANCE (FY 16/17): \$88,489K , 10 percent

STATUS:	Nee	ds Attentio	on		
FYTD as of:	Approved Budget /	Actual	Variance		Re-Estimate
	Planned		\$	%	(If Applicable)
Jul-16	5,255	5,258	3	0.1%	
Aug-16	12,449	11,196	-1,253	-10.1%	
Sep-16	19,642	17,317	-2,325	-11.8%	
Oct-16	26,936	23,309	-3,627	-13.5%	
Nov-16	34,230				
Dec-16	41,625				
Jan-17	49,135				
Feb-17	56,859				
Mar-17	64,584				
Apr-17	72,408				-
May-17	80,333				
Jun-17	88,489				
	Acceptabl	e Variance	±	10%	



SOURCE OF DATA: Fis 3212500, 3212520, 3212530, 3212540, 3212580, 3212585, 3233150, 3352200 and 4010602.

#### 1. BACKGROUND / PURPOSE

 This metric measures the Water System's ongoing efforts to continue to meet mandated water quality regulations.

#### 2. ACHIEVEMENTS / MILESTONES MET

 Distribution Treatment Operations – Reduction of chlorine to treat water at the Los Angeles and Upper Stone Canyon reservoirs continues due to the installation of shade balls.

#### 3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- Distribution Reservoir O&M Security Services budget has been adjusted to align with anticipated year end projected expenditures.
- Distribution Treatment and Filter Plant
  Operations was underspent due a decrease
  in chemical usage. The budget for
  distribution treatment chemicals was
  reduced accordingly.

#### 4. MITIGATION PLAN AND / OR RECOMMENDATIONS

 Expenditure progress will continue to be carefully monitored through the Water System monthly financial and variance reports.



### **Next Steps**

- Continue to refine rates metrics reporting through an iterative process with the Board, OPA, City Council and LADWP
- Continue to monitor/measure overall performance to align with Board approved rates metrics targets
- Continue to review to identify and propose to the Board any addition, deletion, or modifications of rates metrics (i.e. specific targets, variance ranges, etc.)



### **EQUITY METRICS DATA INITIATIVE**

# Putting Customers First

## What are Equity Metrics?

- Equity Metrics are performance indicators that provide policymakers and program managers with data to assess how well programs, services and resources are distributed and utilized geographically and demographically
- On August 16, 2016, the Board of Water and Power Commissioners' (Board) approved Resolution No. 017036 establishing the LADWP's Equity Metrics Data Initiative (EMDI)
- On December 6, 2016, the Board approved Resolution No. 017107 finalizing fifteen (15) equity metrics within four core categories

## **LADWP Equity Core Areas & Programs**

<b>Equity Core Category</b>	Metric
Water & Power	Water Quality Complaints
Infrastructure Investment	2. Water System Probability of Failure & Planned
	Replacements
	3. SAIDI & SAIFI
	4. Power System Reliability Program (PSRP) – Pole,
	Transformer, Cable Replacements
Customer Incentive	5. Rain Barrel/Cistern/Water Tank Rebates
Programs/Services	6. Turf Removal Rebates
	7. Tree Canopy Program
	8. Commercial Direct Install Program
	9. Home Energy Improvement Program
	10. Refrigerator Exchange Program
	11. Consumer Rebate Program
	12. Electric Vehicle Infrastructure
	13. Low Income & Lifeline Programs
Procurement	14. LADWP SBE/DVBE Program
Employment	15. New Hire/Promotion Demographics

### **Water Mainline Conditions & Planned**

Replacement Map

Decisions to replace Water
 Mainlines take into consideration
 the Mainlines' Likelihood of
 Failure (LOF) Grade

 The factors that contribute to the LOF Grade are:

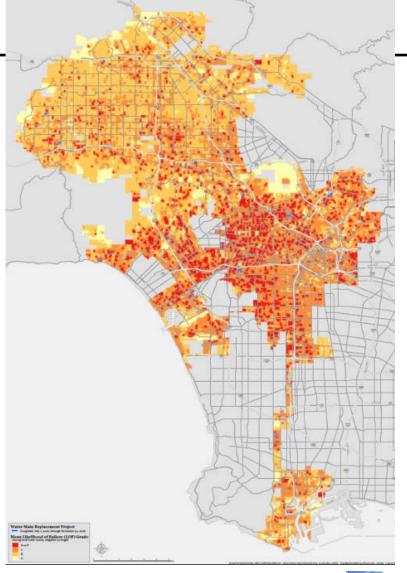
Leaks Age

Material Diameter

Pressure Elevation

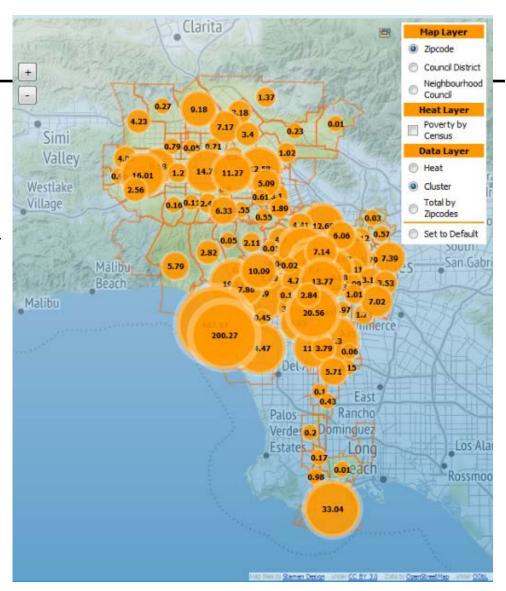
Soil Corrosiveness Hillside/Ground

Movement



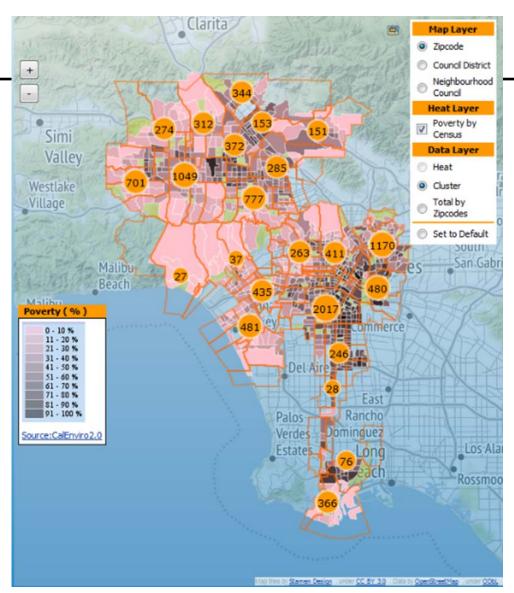
### **SAIDI**

- System Average Interruption Duration Index (SAIDI) for Dec 2016. It is the average outage duration for each customer served per year
- High outage duration in Venice area is due to Los Angels Fire Department request to deenergize 5 circuits for 12 hours

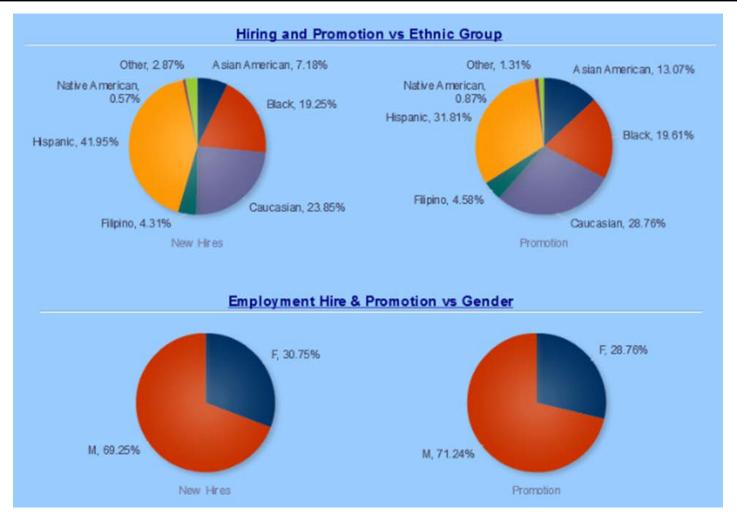


# Tree Canopy Program

- Continuing its extensive tree planting involvement since 1998, LADWP recently signed an agreement with the Los Angeles City Plants program to fund 42,000 additional trees to be planted throughout the City of Los Angeles over the next two years.
- City Plants addresses the low tree canopy cover in the City, which averages 21%, well below the national average of 27%
- Trees Planted from Jan 2015 through Dec 2015



# New Hire and Promotional Demographics



### **EMDI Draft Reporting Timeline**

- ✓ August 2016 Board of Water and Power Commissioners' (Board) approved Resolution No. 017036 establishing the LADWP's Equity Metrics Data Initiative (EMDI)
- ✓ December 2016 Board approved Resolution No. 017107 finalizing fifteen (15) equity metrics within four core categories
- ✓ January 2017 EMDI report presented to OPA
- ✓ February 2017 EMDI report presented to Board
- ✓ February 2017 EMDI graphs available on the LADWP website: <u>www.ladwp.com/equitymetrics</u>
- ☐ July 2017 EMDI report to OPA
- ☐ August 2017 EMDI report to Board