

INFORMATIONAL BOARD LETTER

ANN M. SANTILLI Interim Chief Financial Officer

DAVID H. WRIGH

General Manager

DATE: February 4, 2019

SUBJECT: LADWP Rates and Equity Metrics Semi-Annual Report

SUMMARY

Attached is the semi-annual report on Rates Metrics and Equity Metrics.

Pursuant to Section 4 of the Water and Electric Rates Ordinances, LADWP 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:

- The Rates Metrics being monitored.
- The results for each metric.
- The target.
- The variance of actual performance from the target.
- Any proposed mitigation plans to address a variance.

The detail information is provided in this Informational Board Letter under section Rates Metrics.

On December 6, 2016, the Board approved Resolution No. 0171 07 finalizing the list of Equity Metrics for LADWP's Equity Metrics Data Initiative (EMDI). LADWP will report Equity Metrics to the Board on a semi-annual basis coinciding with Rates Metrics reporting to the Board. The detailed information is provided in this Informational Board Letter under section Equity Metrics.

RATES METRICS

Rates Metrics 2018-2019 (Fiscal-Year-To-Date October 2018)

The Rates Metrics currently include 20 for Water System, 28 for Power System, and 9 for Joint System. A summary of the fiscal-year-to-date October 2018 performance status of all these metrics is listed in the Rates Metrics Summary (Attachment I).

LADWP Rates Metrics Status (Fiscal Year To Date October 2018)						
Performance Stat	# Metrics					
Exceeds Target	10					
Within Acceptable Variance	Green	30				
Outside Acceptable Variance	Red	9				
Needs Attention	Yellow	3				
Information Only	5					
	Total	57				

For the period ending October 2018, 70 percent of the metrics are either within the acceptable variance or exceed the target.

Twelve of the fifty-seven Rates Metrics are outside the acceptable variance or need attention. Explanations for metrics outside the acceptable variance include:

Metric	Variance	Explanation
Average Cost Per Electric Distribution Mechanic Trainee	55.3% (\$218K)	• The monthly cost per trainee calculation will vary from month to month based on factors such as class size, dropouts, terminations and the final number of graduates.
PSRP Transmission Capital (Budget vs. Actual)	37.6% (\$8.2M)	 Accelerated construction efforts are bringing projects back on schedule. Capital expenses should slow down toward the second half of the fiscal year. Several of the capital projects are reimbursable. Reimbursements will be received in the second half of the fiscal year.
PSRP Transmission O&M (Budget vs. Actual)	-20.1% (\$-2.4M)	• The October year-to-date (YTD) variance is due to overhead transmission crews working on capital projects. Additionally, reimbursements received earlier in the fiscal year caused some inconsistencies in the budget reporting.
Cable Replacement (Miles of Cable Replaced Against Plan)	-22% (-3.7 Miles)	The October YTD variance is due to backlog in the paper work to close completed jobs.
Average Unit Cost per Mile of Cable (Plan vs Actual \$/per mile)	34.6% (\$293.7)	• The October YTD variance is due to the backlog in the paper work to close completed jobs. The variance is expected to fluctuate as the backlog of paper work is decreased. Power Transmission and Distribution Division will continue to work with Power New Business Development and Technical Application to develop a mechanism to align labor, materials, fleet charges, units, etc.

Power System

Water System

Metric	Variance	Explanation
Water Supply Costs Capital (Budget vs. Actual)	-15.8% (\$-4.1M)	 The demand for residential and commercial water conservation rebates has decreased.

Joint System

Metric	Variance	Explanation
Financial and Human Resources Replacement Project (Budget vs. Actual)	-45.6% (\$-2M)	 Contracts have not yet been established to buy Enterprise Resource Planning (ERP) software and hire a systems implementation consulting team. Additionally, the Budget System Replacement (BSR) contract award was delayed to November 2018.
Energy Efficiency Portfolio (Budget vs. Actual)	46.7% (\$17M)	Continue to ramp up planned energy efficiency programs including Phase II of the Residential Insulation Program and a launch of the Upstream Commercial Food Service Program. Staff was added to fill vacancies.

The Corporate Performance Group is working with the respective operating units to closely monitor the progress as they take steps to bring the metrics to within the acceptable variance range.

To the extent that more information is required beyond the high level summary dashboards, the LADWP can provide more detailed information as requested by the Board or the Office of Public Accountability.

Rates Metrics Fiscal Year 2017-2018

The Rates Metrics for Fiscal Year 2017-2018 included 20 for Water System, 28 for Power System, and 9 for Joint System. A summary of the fiscal-year-to-date June 2018 performance status of all these metrics is listed in the Rates Metrics Summary (Attachment II).

LADWP Rates N (Fiscal Year To D		
Performance Stat	tus	# Metrics
Exceeds Target	8	
Within Acceptable Variance	29	
Outside Acceptable Variance	14	
Needs Attention	1	
Information Only	5	
	Total	57

For the period ending June 2018, 65 percent of the metrics were either within the acceptable variance or exceed the target. Achievements highlighted in the metrics include:

Power System

- Met Renewable Portfolio Standard (RPS) goals and spending targets for wind, solar and geothermal.
- Exceeded Power System Reliability Program (PSRP) asset replacement targets for distribution assets and met spending goals.

Water System

- Exceeded mainline replacement targets.
- Exceeded new distribution crew targets.

Fourteen of the fifty-seven Rates Metrics are outside the acceptable variance or need attention. Explanations for metrics remaining outside the acceptable variance at the end of the fiscal year include:

Power System

Metric	Variance	Explanation
PSRP Transmission O&M (Budget vs. Actual)	-22% (\$7M)	 Variance caused by resource-shifting to prioritize other types of capital work, such as new development. Metrics for PSRP capital work exceeded their targets.
PSRP Substation Capital (Budget vs. Actual)	41% (\$34M)	 Prioritized substation capital expenditures for the Summer Readiness program to proactively prepare substations for summer load, an approach that has made the substations more reliable.
Average Unit Cost Per Pole (Plan vs Actual \$/unit)	26% (\$7.3)	• The June YTD variance is due to year-end accrual of contractual payments totaling approximately \$15.5M for the month of June 2018. The January-May YTD variance was within target at -2.5%.
Average Unit Cost per Mile of Cable (Plan vs Actual \$/per mile	25% (\$208.6)	• The June YTD variance is due to year-end accrual of contractual payments totaling approximately \$6M for the month of June 2018. The January-May YTD variance was within the target at 3.4%.

Water System

Metric	Variance	Explanation
Water Supply Costs O&M (Budget vs. Actual)	29% (\$64M)	 Increase in purchased water due to less Aqueduct deliveries in early 2018 because of routine plant shutdowns.
Water Supply Cost Capital (Budget vs. Actual)	-39% (\$63M)	 Re-evaluating current recycled water projects to work with regulators to develop new potable reuse strategy.
Recycled Water Delivered (Acre-Feet Plan vs. Actual)	-19% (2,222 AF)	
LA Aqueduct Capital (Budget vs Actual)	-34% (\$11M)	 Due to high runoff – LA Aqueduct Capital was low for the fiscal year as work was shifted to take advantage of the record runoff and mitigate potential damage due to flooding.
LA Aqueduct O&M (Budget vs. Actual)	29% (\$11M)	 Unforeseen expenses associated with managing record runoff and mitigating potential damage due to flooding.
Water Usage (Gallons Per Capita Day)	8% (8 GPCD)	• Met Mayor's conservation goals in 2017 and increased conservation education this summer to address slight increase in water usage.
Pump Stations (Budget vs. Actual)	-41% (\$7M)	 Replaced 15 pumps as planned. Larger asset replacement projects at Penstock and Van Norman Pump Stations were behind schedule due to resources been pulled away to repair other fire damaged facilities.
Trunkline Replacement (Plan vs. Actual - Feet)	-23% (1,809 FT)	 Major contract delay for trunk line resources and materials; working to expedite contract approvals.
Water Quality Cost Capital (Budget vs. Actual)	-25% (\$67M)	 Split large Treatment Plant project into smaller projects, pushing some projects into future years at a lower overall cost.

Joint System

Metric	Variance	Explanation
Financial and Human Resources Replacement Project (Budget vs. Actual)	-74% (\$23M)	 Contracts have not yet been established to buy ERP software and hire a systems implementation consulting team. Additionally, the BSR contract award was delayed to November 2018.

Rates Metrics Reporting Dashboards

A one-page dashboard for each of the metrics is created to provide concise and pertinent information on the status of the LADWP's work as represented by the Rates Metrics to the Mayor, City Council, Board, Office of Public Accountability/Ratepayer Advocate, customers, and other stakeholders. For each metric, the corresponding dashboard provides the metric definition; the target for the fiscal year; performance/variance analysis and forecast; achievements/milestones met; and mitigation plans and/or recommendations to improve performance as necessary. The performance status of each Rate Metrics is reflected through the following colors:

- Blue: Exceeds Target
- Green: Within Acceptable Variance
- Yellow: Needs Attention
- Red: Outside Acceptable Variance

Each rate metric manager is responsible for providing the status update information and its accuracy in a timely manner to the Corporate Performance Group. The default status on Rates Metrics will either be green or red. The Corporate Performance Group, with the assistance from the Systems, will ascertain whether a different status, such as blue or yellow is warranted given additional information and/or detailed mitigation plans.

EQUITY METRICS

Background and Purpose

The Board approved Resolution No. 0171 07 on December 6, 2016, finalizing the list of Equity Metrics for LADWP's EMDI. The EMDI establishes the framework to compare demographics with ratepayer and service locations to determine whether geographic or other categorical disparities exist.

Status and Progress

Since the establishment of the EMDI, the LADWP has made significant efforts toward achieving equitable outcomes. For the period January to October 2018, the following are examples of managers incorporating equity considerations into their policy decision making and outreach:

- The Electric Vehicle (EV) Program budget was increased significantly to facilitate the goal of installing 10,000 chargers in areas throughout the city where a gap in EV Charging infrastructure were identified.
- Energy Efficiency and Conservation has increased their program budget by \$20 million per year for the next five years in order to meet the energy demand reduction which is a key component of the Integrated Resource Plan. New programing will initially target low income renters in multifamily housing and hard to reach customer segments in order to improve equity. Management will be using the geographic distribution of program participation to target mailings and

work with non-profit organizations to disseminate information and engage customers.

- The Human Resources Division has developed several diversity-targeted recruitment activities aimed at increasing female and minority candidates for Engineering Associates. LADWP interviewed engineering students and professionals at the national and regional conference of the Society of Women Engineers, the Society of Hispanic Professional Engineers, and the National Society of Black Engineers between January and November 2018.
- LADWP partnered with Los Angeles Trade Technical College to complete the development of an online electricity course which will meet requirements for various targeted Power System skilled craft classifications. This course will be available to high school and community college students.
- The Human Resources Division has implemented new recruitment strategies for gender and diversity recruitment for eight critical craft job classifications. These include working with the Los Angeles Unified School District and Los Angeles Trade Technical College, Women Build Nations, Women in Non-Traditional Employment Roles, and Tradeswomen, Inc.

Equity Metrics Budget and Spending

To further the LADWP's efforts, Financial Services Organization will be compiling and monitoring the LADWP's budget and spending on EMDI efforts. Corporate Performance is working with the various operating groups to identify the total budgets for programs in the EMDI. The budget and spending data will be further refined over the current fiscal year to identify the incremental funding planned and spent toward accomplishing equity efforts and outcomes.

The budgets and spending data collected for programs in the EMDI are as follows:

	Tot	al: \$	101,378,747
٠	Energy Efficiency	<u>\$</u>	68,202,000
٠	Water Quality Lab Testing	\$	15,691,475
٠	Electric Vehicle Infrastructure	\$	11,164,972
٠	Community Solar	\$	2,496,500
٠	Supply Chain (Supplier Diversity Administration)	\$	1,928,400
٠	Human Resources (Diversity Recruitment)	\$	1,895,400

Equity Research and Studies

In response to the feedback received from the Board and stakeholders at various community meetings recommending the LADWP work with academic and research institutions, Corporate Performance has embarked on the following:

- Continue to work with Loyola Marymount University to participate in and receive data from the upcoming annual Los Angeles Public Opinion Survey conducted by their Thomas and Dorothy Leavey Center for the Study of Los Angeles (StudyLA). StudyLA develops and conducts innovative research in leadership studies, quality-of-life, and contemporary urban issues in the Los Angeles region. Each year StudyLA conducts the region's largest general social survey (Los Angeles Public Opinion Survey) on the residents of Los Angeles County to gauge their outlook for the year.
- The LADWP worked with Maroon Society, a research organization, to analyze data collected on customer participation in the programs identified in the EMDI. Maroon Society analyzed the Low Income and Lifeline participation, energy efficiency rebate program participation data along with Census data. The study looked at whether the customers that the rebate programs were targeting were actually taking advantage of the programs. The study also identified areas in the City that can benefit from additional outreach in order to improve participation levels. The study also analyzed whether customers in high poverty, non-English speaking and/or high rent burden areas were participating in the Low Income and/or Lifeline programs.
- Corporate Performance initiated a study about cash paying customers and their participation in the Low Income and Lifeline programs and Energy Efficiency Rebate Programs. The study found that:
 - Eighteen percent of all residential customers and nine percent of all commercial and industrial customers paid their bills at least once by cash.
 - Four percent of all residential customers participated in the LADWP's rebate programs and three percent of cash paying residential customers took advantage of rebate programs.
 - Eleven percent of commercial and industrial customers took advantage of the rebate programs and fifteen percent of cash paying commercial and industrial customers took advantage of rebate programs.

Financial Services Organization has allocated \$500,000 over the next five years to partner with leading Los Angeles Academic Research Universities for research and studies that will further enhance the EMDI. This work will be done under the Memorandum of Agreement between LADWP and the University of California, Los Angeles. For instance, based on the findings of the Maroon Society report, the cash paying customers study and on data collected from the operating groups, Corporate Performance will engage academic institutions to perform further analysis and make recommendations on opportunities to improve equity.

Equity Metrics Reporting Dashboards

The Equity Metrics dashboards provide a high level citywide view of LADWP service, infrastructure improvement, and program participation.

The first iteration of the Equity Metrics was presented to the Board on March 7, 2017. The semi-annual update to these is now available on the DWPSTAT. The update for most of the metrics is based on January to October 2018 data.

A summary dashboard has been created for each Equity Metric providing the following information as applicable:

- The Equity Metric core category
- The responsible manager
- Criteria
- Achievements/Milestones
- Issues
- Outreach Strategy/Plan

Each equity metric manager is responsible for providing updated information and data in a timely manner to the Corporate Performance Group. The dashboards are in Attachment III.

We have made available on the LADWP website a pdf of each metric's heat map/chart/table at: <u>https://www.ladwp.com/equitymetrics</u>. For those metrics that are rebate related, there is a downloadable Excel spreadsheet containing data aggregated by zip code.

ATTACHMENTS

- Rates Metrics FY2018-2019 July to October (Attachment I)
- Rates Metrics FY2017-2018 July to June (Attachment II)
- Equity Metrics Dashboards (Attachment III)

ATTACHMENT I LADWP Rates Metrics Summary 2018-2019 Fiscal Year To Date (October 2018)

LADWP RATES METRICS SUMMARY

Related Rate Adjustment Factor	Category	#	Board Metric	Definition	FY 18/19 Target	Acceptable Variance	Responsible Manager	October 2018 Performance
	Repowering/Once Through Cooling	1	Repowering/Once Through Cooling budget vs. actual (\$M)	Board Approved Estimated Project Cost vs. Actual project costs	FY18/19 Board Approved Budget - May 2018	+/- 15%	Marcelo Di Paolo Silvia Lozano	1.8%
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	Marcelo Di Paolo Silvia Lozano	
	Power System Training Plan	3	Average cost of Power System Training Plan per trainee	Average cost of training for Electric Distribution Mechanic Technician (EDMT) classification per trainee that graduates from respective training program	EDMT: \$394.5K	+/- 15%	Brian Wilbur	55.3%
Reliability Cost	Power System Training Plan	4	Average cost of Power System Training Plan per trainee	Average cost of training for Electrical Mechanic Technician (EMT) classification per trainee that graduates from respective training program	EMT: \$481.1K	+/- 15%	Brian Wilbur	-0.9%
Adjustment Factor	Power System Training Plan	5	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: 20	+/- 15%	Brian Wilbur	9.1%
	Power System Training Plan	6	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: 34	+/- 15%	Brian Wilbur	17.6%
Energy Cost Adjustment Factor	Renewable Portfolio Standard (Owned)	7	Total Renewable Portfolio Standard (RPS) Ratio (%)	GWh from RPS plants/GWh for all customers (State requirement)	29% RPS for Calendar Year 2018	+/- 3% of each canlendar year's goal toward state law mandates	John Giese	5.2%
	Renewable Portfolio Standard (Owned)	8	Total RPS cost (\$/MWh) vs. plan, by technology (Wind)	Total RPS purchased power cost (\$/MWh) as compared to plan, by technology (Wind)	Wind: \$83.87/MWh	+/- 15%	Jan Lukjaniec	1.2%
	Renewable Portfolio Standard (Owned)	9	Total RPS cost (\$/MWh) vs. plan, by technology (Solar)	Total RPS purchased power cost (\$/MWh) as compared to plan, by technology (Solar)	Solar: \$72.70/MWh	+/- 15%	Jan Lukjaniec	1.8%
	Renewable Portfolio Standard (Owned)	10	Total RPS cost (\$/MWh) vs. plan, by technology (Geothermal)	Total RPS purchased power cost (\$/MWh) as compared to plan, by technology (Geothermal)	Geothermal: \$81.61/MWh	+/- 15%	Jan Lukjaniec	2.6%

Needs Attention

Related Rate Adjustment Factor	Category	#	Board Metric	Definition	FY 18/19 Target	Acceptable Variance	Responsible Manager	October 2018 Performance
	Renewable Portfolio Standard (Owned)	11	Total RPS cost (\$/MWh) vs. plan, by technology (Biogas)	Total RPS purchased power cost (\$/MWh) as compared to plan, by technology (Biogas)	Biogas: \$84.36/MWh	+/- 15%	Jan Lukjaniec	-100.0%
Energy Cost Adjustment Factor	Renewable Portfolio Standard (Purchased)	12	Average levelized cost of energy of purchased power agreements (PPAs) signed during the previous fiscal year	Cost per MWh for all PPAs	\$97.50/MWh	+/- 15%	Jan Lukjaniec	0.0%
	Power System Reliability Program (Generation)	13	Budget vs. actual (\$M) for capital in the Generation budget	Board Approved Annual Budget vs. Actual expenditures	FY18/19 Board Approved Budget - May 2018	+/- 15%	Robert Fick	7.4%
	Power System Reliability	14	Budget vs. actual (\$M) for capital included in the Transmission budget	Board Approved Annual Budget vs. Actual expenditures	FY18/19 Board Approved Budget - May 2018	+/- 15%	John Hormozi	37.6%
	Program (Transmission)	15	Budget vs. actual (\$M) for O&M expenses included in the Transmission budget	Board Approved Annual Budget vs. Actual expenditures	FY18/19 Board Approved Budget - May 2018	+/- 15%	Terry Jackson	-20.1%
	Power System Reliability Program (Transmission)	16	Cost per mile of underground circuits	Cost per mile of underground circuits	\$2.8 million	+/- 15%	Silvia Lozano	0.0%
	Power System Reliability	17	Budget vs. actual (\$M) for capital in the Substation budget	Board Approved Annual Budget vs. Actual expenditures	FY18/19 Board Approved Budget - May 2018	+/- 15%	Jeffrey Thornburg	9.1%
	Program (Substation)	18	Budget vs. actual (\$M) for O&M expenses in the Substation budget	Board Approved Annual Budget vs. Actual expenditures	FY18/19 Board Approved Budget - May 2018	+/- 15%	David Haerle	6.6%
	Power System Reliability	19	Budget vs. actual (\$M) for capital in the Distribution budget	Board Approved Annual Budget vs. Actual expenditures	FY18/19 Board Approved Budget - May 2018	+/- 15%	Sager Farraj	8.7%
	Program (Distribution)	20	Budget vs. actual (\$M) for O&M expenses in the Distribution budget	Board Approved Annual Budget vs. Actual expenditures	FY18/19 Board Approved Budget - May 2018	+/- 15%	Mike Barkhuff	12.4%
Reliability Cost Adjustment Factor		21	Number of fixed assets replaced against plan for critical Distribution assets (Transformers)	Numbers of transformers replaced against plan	Transformer: 800	+/- 15%	Mike Barkhuff	72.0%
Aujustment ractor	Power System Reliability	22	Number of fixed assets replaced against plan for critical Distribution assets (Poles)	Numbers of poles replaced against plan	Pole: 3,500	+/- 15%	Mike Barkhuff	12.1%
	Program (Distribution)	23	Number of fixed assets replaced against plan for critical Distribution assets (Crossarms)	Numbers of crossarms replaced against plan	Cross-arm: 10,000	+/- 15%	Mike Barkhuff	-0.6%
		24	Number of fixed assets replaced against plan for critical Distribution assets (Cable)	Numbers of miles of cable replaced against plan	Cable: 50 miles	+/- 15%	Sager Farraj	-22.0%

Related Rate Adjustment Factor	Category	#	Board Metric	Definition	FY 18/19 Target	Acceptable Variance	Responsible Manager	October 2018 Performance
		25	Average unit price for critical Distribution assets (Transformers)	Average unit price per transformer	Transformer: \$15.2k	+/- 15%	William Herriott	-63.2%
	Power System Reliability	26	Average unit price for critical Distribution assets (Poles)	Average unit price per pole	Pole: \$27.7k	+/- 15%	William Herriott	-32.5%
	Program (Distribution)	27	Average unit price for critical Distribution assets (Cross-arms)	Average unit price per cross-arm	Cross-arm: \$2.5k	+/- 15%	William Herriott	-32.0%
		28	Average unit price for critical Distribution assets (Cable)	Average unit price per mile of cable	Cable: \$849.4k	+/- 15%	William Herriott	34.6%
Water (None)	Water System Staffing Program	29	Number of new distribution infrastructure crews as compared to plan	Number of new crews dedicated to distribution infrastructure as compared to plan	3 crews (24 employees)	N/A	Breonia Lindsey/Sandy Foster	87.5%
	Water Supply	30	Water supply costs budget vs. actual (\$M) for capital	Board Approved Annual Budget vs. Actual expenditures	FY18/19 Board Approved Budget - May 2018	+/- 10%	Dora Maese	-15.8%
	Water Supply	31	Water supply costs budget vs. actual (SM) for O&M	Board Approved Annual Budget vs. Actual expenditures		+/- 10%	Dora Maese	-6.4%
	Water Supply	32	Annual quantity of purchased water in acre-feet (AF) against plan	AF of water purchased against plan		Info only	Dora Maese	NA
	Water Supply	33	Annual quantity of recycled water delivered against plan (AF)	AF of recycled water delivered against plan	12,000 AF	+/- 10%	W. Van Wagoner	-7.8%
Water Supply Cost	Water Supply	34	Stormwater system capacity milestones (AF) against plan	AF of stormwater system capacity as of a milestone date against plan	72,000 AF	+/- 10%	David Pettijohn	-4.9%
Adjustment Factor	Water Supply	35	Annual groundwater production in Central Basin (AF) against plan	AF of Groundwater in Central Basin against plan	No Target	Info only	Steven Cole	NA
	Water Supply	36	Annual groundwater production in	AF of Groundwater in San Fernando Basin against plan	No Target	Info only	Steven Cole	NA
	Capital Improvement Program	37	Budget vs. actual (\$M) for Aqueduct refurbishment capital	Board Approved Annual Budget vs. Actual expenditures	FY18/19 Board Approved Budget - May 2018	+/- 10%	Daniel Raftevold	-2.6%
	Capital Improvement Program	38		Board Approved Annual Budget vs. Actual expenditures	FY18/19 Board Approved Budget - May 2018	+/- 10%	Daniel Raftevold	3.7%
	Water Supply	39	Level of water conservation against target (GPCD)	Gallons per capita per day (GPCD) of water conserved against target	106 Gallons	+/- 10%	Penny Falcon	5.7%

Related Rate Adjustment Factor	Category	#	Board Metric	Definition	FY 18/19 Target	Acceptable Variance	Responsible Manager	October 2018 Performance
	Capital Improvement Program	40	Budget vs. actual (\$M) for fixed assets replacement	Board Approved Annual Budget vs. Actual expenditures	FY18/19 Board Approved Budget - May 2018	+/- 10%	Dora Maese	-2.8%
	Capital Improvement Program	41	Budget vs. actual (\$M) for Pump Stations	Board Approved Annual Budget vs. Actual expenditures	FY18/19 Board Approved Budget - May 2018	+/- 10%	Susan Rowghani	-12.7%
	Capital Improvement Program	42	Budget vs. actual (\$M) for Regulator/ Relief Station Retrofits	Board Approved Annual Budget vs. Actual expenditures	FY18/19 Board Approved Budget - May 2018	+/- 10%	Susan Rowghani	13.3%
	Capital Improvement Program	43	Assets replaced against plan	Feet of mainline replaced against plan	Mainline: 232,000 Feet	+/- 10%	Mainline & Meters: Breonia Lindsey/Sandy Foster	-13.2%
-	Capital Improvement Program	44	Assets replaced against plan	Feet of trunkline replaced against plan	Trunkline: 7,700 Feet	+/- 10%	Trunkline: Susan Rowghani	0.0%
	Capital Improvement Program	45	Assets replaced against plan	Number of meters replaced against plan	Meters: 31,500	+/- 10%	Mainline & Meters: Breonia Lindsey/Sandy Foster	3.7%
Water Quality Improvement Adjustment Factor	Water Quality Projects	46	Total Water Quality Budget vs. actual (\$M) for capital	Board Approved Annual Budget vs. Actual expenditures	FY18/19 Board Approved Budget - May 2018	+/- 10%	Susan Rowghani	-12.3%
	Water Quality Projects	47	Total Water Quality Budget vs. actual (\$M) for O&M	Board Approved Annual Budget vs. Actual expenditures	FY18/19 Board Approved Budget - May 2018	+/- 10%	Steven Cole	-1.7%
Owens Valley Regulatory Adjustment Factor	Owens Valley	48	Budget vs. actual for Owens Lake O&M (\$M)	Board Approved Annual Budget vs. Actual expenditures	Target Suspended	Info only	Michael Grahek	NA
	Human Resources	49	Human Resources Total FTEs against plan	Total number of full time equivalent positions occupied vs. annual Authorized Personnel Resolution	FY18/19 Board Approved Annual Authorized Personnel Resolution - May 2018	+/- 15%	Shannon Pascual	-8.6%
	Financial and Human Resources Replacement Project	50	Financial and Human Resources Replacement Project total spending against plan	Board Approved Annual Budget vs. Actual expenditures	FY18/19 Board Approved Budget - May 2018	+/- 20%	Stephan Tucker	-45.6%

Related Rate Adjustment Factor	Category	#	Board Metric	Definition	FY 18/19 Target	Acceptable Variance	Responsible Manager	October 2018 Performance
Joint (None)	Financial and Human Resources Replacement Project	51	Financial and Human Resources Replacement Project progress against schedule	Project milestones met against project schedule	Budget System Replacement Project (BSR) BSR - Award BSR Implementation Contract - 9/30/18 BSR - Complete BSR Development/Begin Testing - 4/1/19 BSR - BSR Go Live - 10/1/19 Enterprise Resource Plan (ERP) ERP - Approve ERP Program Charter and Project Mgmt Plan - 7/1/18 ERP - Award RFP for Enterprise Technology Advisory Services - 9/25/18 ERP - Award RFP for Or Organizational Change Mgmt Services Contract - 6/30/19 ERP - Advertise RFP for Software Vendor - 9/1/18 ERP - Advertise for System Integrator - 1/1/19 ERP - Advertise IV&V Services RFP - 1/31/20 ERP - Advertise IV&V Services RFP - 1/31/20	+/- 60 Days based on DWP Project Plan TBD	Stephan Tucker	
	LADWP Employee Cost	52	LADWP Employee Cost Budget vs. Actual (\$M)	LADWP total employee costs (including regular labor, overtime, pension and healthcare, excluding daily exempt and Utility Pre-Craft Trainees) Budget vs. Actual	FY18/19 Board Approved Budget - May 2018	+/- 15%	LADWP Senior Management	-5.8%
	LADWP Employees per Customer Meter	53	Total Number of Water and Power Employees per Customer Meter	Total number of water and power employees (excluding daily exempt and Utility Pre-Craft Trainees) per water and power meters	No Target	Info only	Corporate Performance	NA
Energy Cost Adjustment Factor	Renewable Portfolio Standard (Owned)	54	Green House Gas (GHG) emissions reduction ratio	GHG emission for current year/GHG emission in 1990 (in millions of metric tons)	55%	+/- 5%	Mark Sedlacek	53.0%
	Energy Efficiency	55	Energy Efficiency (EE) ratio (%)	GWh installed compared to the 2010 baseline/GWh for all customers	1.75%	+/- 15%	David Jacot	93.5%
Energy Cost Adjustment Factor	Energy Efficiency Energy Efficiency		EE portfolio	Board Approved Annual Budget vs. Actual expenditures Cost per kWh over lifetime of	FY18/19 Board Approved Budget - May 2018 Annual metric: Levelized	+/- 15%	David Jacot David Jacot	46.7%
	Energy Eniciency	5/	Levenzed EE program Costs (\$/KWh)	Lost per KWh over lifetime of installed energy efficiency solutions	Annual metric: Levelized Cost \$0.0671/kWh	+/- 15%		

Needs Attention

Power System

LADWP RATES METRIC - Once Through Cooling, Capital (Power)

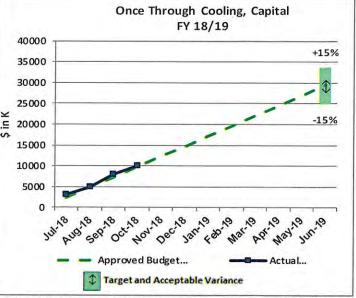
RESPONSIBLE MANAGER: Marcelo Di Paolo and Silvia Lozano, Suma Togam Power Planning, Development, and Engineering Division REPORTING PERIOD: October 2018

1

DEFINITION OF RATES METRIC: Board Approved FY 18/19 Budget vs. Actual Expenditures For Once Through Cooling/Repowering, Capital **TARGET & ACCEPTABLE VARIANCE (FY 18/19):** Target = \$29,420K; Acceptable Variance = ± 15%

STATUS: Within Acceptable Variance

	Re-Estimate	nce	Varia	Actual	Approved Budget	FYTD
		%	\$ in K	(\$ in K)	(\$ in K)	as of:
		30.2%	739.3	3,191.0	2,451.7	Jul-18
	4,903.3	3.0%	147.7	5,051.0	4,903.3	Aug-18
	7,355.0	9.0%	665.0	8,020.0	7,355.0	Sep-18
	9,806.7	1.8%	176.3	9,983.0	9,806.7	Oct-18
1	12,258.3				12,258.3	Nov-18
	14,710.0				14,710.0	Dec-18
	17,161.7			· · · · · · · · · · · · · · · · · · ·	17,161.7	Jan-19
	19,613.3	1.			19,613.3	Feb-19
	22,065.0				22,065.0	Mar-19
	24,516.7				24,516.7	Apr-19
	26,968.3	-			26,968.3	May-19
	29,591.0				29,419.5	Jun-19
	0.6%	15%	±	e Variance	Acceptable	
*	12/31/2016	\$1,067M	oject Total*	ng Phase I Pro	SGS Repow erin	
	12/31/2021	\$660M	oject Total*	ng Phase II Pro	SGS Repow erir	5
	6/30/2025	\$701M	oject Total	epow ering Pi	Haynes R	
	6/30/2025	\$2,428M	jects Total	OTC Pro		



Note: SGS Repow ering Phase I consists of Job O1195; SGS Phase II consists of Jobs O9790, O9778, and O9782

SOURCE OF DATA: FI 21165 and FI 21150 (KPI # 01.03.01.05)

1. BACKGROUND / PURPOSE

• This is a summary of expenditures for capital projects per the State Water Resources Control Board's 2010 Statewide Once-Through Cooling (OTC) Policy to eliminate ocean water cooling.

2. ACHIEVEMENTS / MILESTONES MET

- Scattergood (SGS) Unit 3 Demolition contractor completed painting of the south exterior walls. (October 2018)
- Haynes (HnGS) Units 3 6 Demolition Project completed evaluation of four proposals for the advertised Request for Proposal (RFP). (October 2018)
- Haynes (HnGS) Units 3 6 Demolition Project completed temporary cable pulls. (October 2018)

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR PROJECTION

- Variance in actual expenditure is due to:
 - Delay with the SGS U1&2 Repowering which necessitated a permanent wall to be constructed rather than a temporary wall. Consequently, the option to install the SGS Unit 1 south wall was exercised under Job O9790 resulting in the cost variance.

Total Project Approved From	
Inception to FY26/27	\$1,932.5 M
Projects Approved to Date	\$1,166.4 M
Project Actuals to Date	\$1,014.8 M
Total OTC Program Variance	-13.0%

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

- There is no mitigation plan at this time.
- The OTC Capital Construction Projects are currently on hold pending detailed transmission system studies on alternatives to repowering. Study completion and report is expected May 2019.
- The OTC projects are required to be completed by the December 2024 (SGS Repowering) and December 2029 (HnGS Repowering) deadlines to replace power generation capabilities at critical locations within the LADWP Power System that will be shutdown to comply with the California state mandate to eliminate ocean cooling at industrial facilities. Not meeting the OTC deadlines will compromise the LADWP power grid due to the loss of 297 megawatts of power from the SGS facility and 1,050 megawatts of power from the HnGS facility.

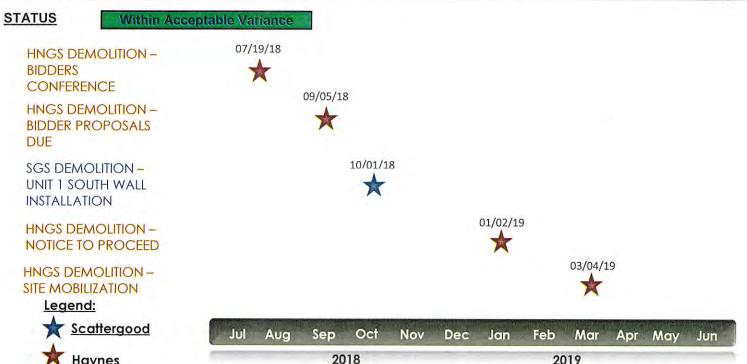
Needs Attention

LADWP RATES METRIC – Once Through Cooling, Project Milestones (Power) Siti dogaw

RESPONSIBLE MANAGER: Marcelo Di Paolo and Silvia Lozano. Power Planning, Development, and Engineering Division REPORTING PERIOD: October 2018

2

DEFINITION OF RATES METRIC: Repowering Project/ Once Through Cooling Project Milestones vs. Compliance Deadlines TARGET & ACCEPTABLE VARIANCE (FY 18/19): Target = Compliance deadlines and plants in-service dates against plans; Acceptable Variance ±45 days



Task		Actual	Acceptable Variance (+/-45 Days from	
HAYNES (HnGS) DEMOLITION – MANDATORY BIDDERS CONFERENCE	07/19/18	07/19/18	N/A	N/A
HnGS DEMOLITION – BIDDER PROPOSALS DUĖ	09/05/18	09/05/18	N/A	N/A
SCATTERGOOD (SGS) DEMOLITION – UNIT 1 SOUTH WALL INSTALLATION	10/01/18		N/A	N/A
HnGS DEMOLITION – NOTICE TO PROCEED	01/02/19		N/A	N/A
HnGS DEMOLITION – SITE MOBILIZATION	03/04/19		N/A	N/A
SGS REGULATORY COMPLIANCE	12/31/24	х	02/14/25	11/16/24
HnGS REGULATORY COMPLIANCE	12/31/29	Х	02/14/30	11/16/29

SOURCE OF DATA: Integrated Resources Plan/Graph (KPI # 04.02.05.03)

BACKGROUND / PURPOSE 1.

Havnes

Compliance with State Water Resources Board deadlines for Once-Through Cooling (OTC) units, December 2024 for Scattergood (SGS) and December 2029 for Haynes (HnGS).

2. ACHIEVEMENTS / MILESTONES MET

- Scattergood (SGS) Unit 3 Demolition contractor completed painting of the south exterior walls. (October 2018)
- Haynes (HnGS) Units 3 6 Demolition Project completed evaluation of four proposals for the advertised Request for Proposal (RFP). (October 2018)
- Haynes (HnGS) Units 3 6 Demolition Project completed temporary cable pulls. (October 2018)

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

The OTC Capital Construction Projects are currently on hold pending detailed transmission system studies on alternatives to repowering. Study completion and report is expected May 2019.

2019

Supply Chain Services reprioritized HnGS RFP advertisement date. Recommendation of award is targeted for January/February 2019 Board date.

MITIGATION PLAN AND / OR RECOMMENDATIONS 4.

Monitoring schedule critical paths closely to ensure compliance with milestone targets.

Exceeds Target

LADWP RATES METRIC - Average Cost per Electric Distribution Mechanic Trainee (Power) **REPORTING PERIOD: October 2018**

RESPONSIBLE MANAGER: Brian Wilbur, Power System Safety and Training

DEFINITION OF RATES METRIC: Average cost of training for Electric Distribution Mechanic Trainee (EDMT) classification per trainee that graduates from the training program

TARGET & ACCEPTABLE VARIANCE (FY 18/19): Target = \$394.5K per EDMT; Acceptable Variance = ± 15%

Outside Acceptable Variance STATUS:

FYTD	Planned	Actual	Vari	ance	Re-Estimate		Average C
as of: ((\$/trainee)	(\$/trainee)	\$	%		800 -	FY
Jul-18	394.5	443.4	48.9	12.4%		700 -	
Aug-18	394.5	540.8	146.3	37.1%		600 -	\wedge
Sep-18	394.5	676.5	282.0	71.5%		a set a	
Oct-18	394.5	612.5	218.0	55.3%		e 500 - 400 -	/
Nov-18	394.5			1	375.2	5	
Dec-18	394.5				375.2	ŝ	
Jan-19	394.5				375.2	200 -	
Feb-19	394.5		-		375.2	100 -	
Mar-19	394.5				375.2	0 +	0 0 0 0 0
Apr-19	394.5				375.2	Iu	18 19 5ep 0ct Nov 18
May-19	394.5		E		375.2	3	
Jun-19	394.5				375.2		 Planned (\$/trainee)
-	Accepta	able Variance	±	15%	-4.9%		Target and Acce

SOURCE OF DATA: Jobs X7922/X7999/X7955 (KPI # 04.01.02.10)

1. BACKGROUND / PURPOSE

To effectively calculate a monthly cost per trainee for an Electric Distribution Mechanic (EDM) completing a 42 month on-the-job and classroom training program.

2. ACHIEVEMENTS / MILESTONES MET

The September 2018 (ALM 15) class produced 10 graduates. There's one pending completion in December bringing the total to 11 graduates.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- The monthly cost per trainee calculation will vary from month to month. It's based on a number of factors which include the adjusted class size, dropouts, terminations and the final number of graduates.
- The cost per trainee is trending lower . because of the decreased actuals with the EDM trainees/trainers Jobs X7922/X7999 as compared to the month of September.

Annualized Job totals for (X7922/X7999/X7955) vary depending on the tools and materials purchased for subsequent new classes.

18 0 tep.

Deci Jan

Target and Acceptable Variance

Maria

Average Cost per Trainee FY 18/19

The Re-Estimate (\$/trainee) of \$375.2k was calculated using the final figures of the related Jobs (X7922/X7999/X7955) for the entire fiscal year 17/18 with the 12 month average trainee occupancy.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

The screening process is continually being reviewed in an effort to increase the quality of candidates and to reduce the dropout rate. Overhead and underground disciplines are no longer separated and all future trainees are cross-trained in both.

+15%

-15%

Jun

Way

Actual (\$/trainee)

LADWP RATES METRIC - Average Cost per Electrical Mechanic Trainee (Power)

REPORTING PERIOD: October 2018 RESPONSIBLE MANAGER: Brian Wilbur, Power System Safety and Training DEFINITION OF RATES METRIC: Average cost of training for Electrical Mechanic Trainee (EMT) classification per trainee that graduates from the training program

481.5

481.5

0.1%

TARGET & ACCEPTABLE VARIANCE (FY 18/19): Target = \$481.1K per EMT; Acceptable Variance = ± 15%

Within Acceptable Variance STATUS: Average Cost per Trainee Variance FYTD Planned Actual **Re-Estimate** (\$/trainee) as of: (\$/trainee) \$ % 900 426.8 (54.3)-11.3% Jul-18 481.1 800 483.0 1.9 0.4% Aug-18 481.1 700 Sep-18 805.9 481.1 324.8 67.5% per Trainee 600 500 476.9 (4.2)-0.9% Oct-18 481.1 Nov-18 481.1 481.5 400 481.5 300 Dec-18 481.1 10 200 481.5 481.1 Jan-19 100 481.5 481.1 Feb-19 0 OCTAS 481.5 AUGIS 500,18 481.1 404.18 Mar-19 481.5 Apr-19 481.1

± 15%

SOURCE OF DATA: Jobs X7923/X7926/X7955 (KPI # 04.01.02.11)

1. BACKGROUND / PURPOSE

Acceptable Variance

481.1

481.1

May-19

Jun-19

To effectively calculate a monthly cost per trainee for an Electrical Mechanic (EM) completing a 40-month on-the-job and classroom training program.

2. ACHIEVEMENTS / MILESTONES MET

The July 2018 (18B) class produced 20 graduates.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- The monthly cost per trainee calculation will vary from month to month. It's based on a number of factors which include the adjusted class size, dropouts, terminations and the final number of graduates.
- The cost per trainee is trending lower due to the overall increased trainee headcount in the EM training program and lower actuals in the relevant related Jobs X7923/X7926 for the EM trainees/trainers as compared to the month of September.

Annualized Job totals for (X7923/X7926/X7955) vary depending on the tools and materials purchased for subsequent new classes.

Decino

C Target and Acceptable Variance

Planned (\$/trainee)

Jan 19 400.19 War 19 APINO Maying Junas

FY 18/19

The Re-Estimate (\$/trainee) of \$481.5k was calculated using the final figures of the related Jobs (X7923/X7926/X7955) for the entire fiscal year 17/18 with the 12 month average trainee occupancy.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

The screening process is continually being reviewed in an effort to increase the quality of candidates and to reduce the dropout rate.

+15%

1

15%

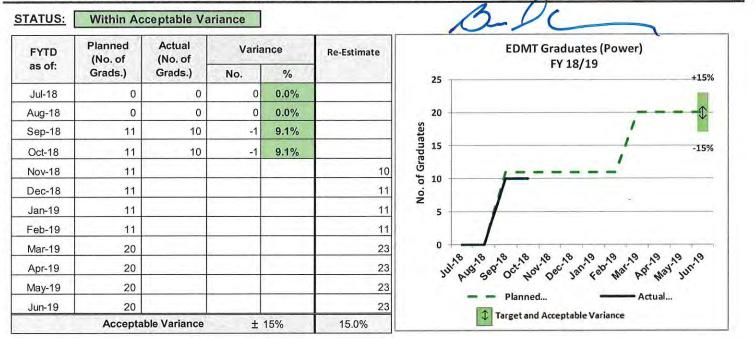
Actual (\$/trainee)

LADWP RATES METRIC - EDMT Graduates (Power)

RESPONSIBLE MANAGER: Brian Wilbur, Power System Safety & Training

REPORTING PERIOD: October 2018

DEFINITION OF RATES METRIC: Electrical Distribution Mechanic Trainee (EDMT) Graduates Against Training Plan **TARGET & ACCEPTABLE VARIANCE (FY 17/18):** Target = 20 graduates; Acceptable Variance = ± 15%



SOURCE OF DATA: Monthly updates provided by the training superintendents. (KPI # 04.01.02.08)

1. BACKGROUND / PURPOSE

 Power System Safety and Training provides the Department with an in-house training operation designed to produce highly qualified Electric Distribution Mechanic (EDMs) to fill the needs of the Power Transmission and Distribution Division. Retirements, promotions, and expected growth in this classification are the basis for hiring practices and training plans.

2. ACHIEVEMENTS / MILESTONES MET

• The September 2018 (ALM 15) class produced 10 graduates. There's one pending completion in December bringing the total to 11 graduates.

3. <u>PERFORMANCE / VARIANCE ANALYSIS</u> <u>& YEAR END PROJECTION</u>

• Due to the modified screening process, there has been an increase in the quality of candidates who have entered the training program, yielding a higher graduation rate.

4. <u>MITIGATION PLAN AND / OR</u> <u>RECOMMENDATIONS</u>

 The screening process is continually being reviewed in an effort to increase the quality of candidates and to reduce the dropout rate.
 Overhead and underground disciplines are no longer separated and all future trainees are cross-trained in both.

Within Acceptable Variance

Exceeds Target

Needs Attention

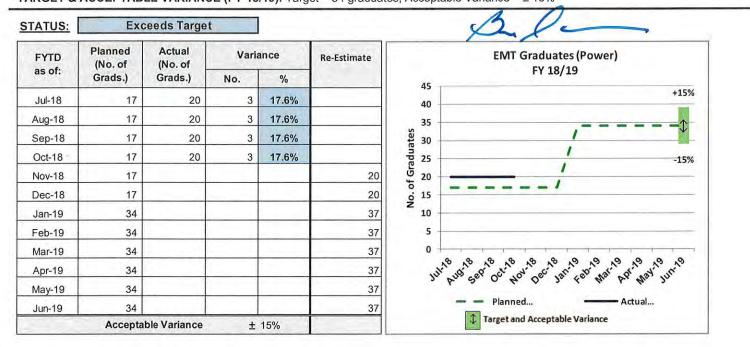
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LADWP RATES METRIC - EMT Graduates (Power)

RESPONSIBLE MANAGER: Brian Wilbur, Power System Safety & Training

REPORTING PERIOD: October 2018

DEFINITION OF RATES METRIC: Electrical Mechanic Trainee (EMT) Graduates Against Training Plan **TARGET & ACCEPTABLE VARIANCE (FY 18/19):** Target = 34 graduates; Acceptable Variance = ± 15%



SOURCE OF DATA: Monthly updates provided by the training superintendents. (KPI # 04.01.02.09)

1. BACKGROUND / PURPOSE

 Power System Safety & Training provides the Department with an in-house training program designed to produce highly qualified Electrical Mechanics (EMs) to fill the needs of the Power Construction & Maintenance (PC&M) Division. Retirements, promotions, and expected growth in this classification are the basis for hiring practices and training plans. To offset the hiring deficiencies of previous years, the plan is to increase trainees being hired over the next five years, and to streamline the training program to meet the goals of the Power System and PC&M Division.

2. ACHIEVEMENTS / MILESTONES MET

The July 2018 (18B) class produced 20 graduates.

3. <u>PERFORMANCE / VARIANCE ANALYSIS</u> <u>& YEAR END PROJECTION</u>

 Hiring deficiencies from 2010 through 2013 have resulted in minimal numbers of graduates in recent years. • Due to the modified screening process, there has been an increase in the quality of candidates who have entered the training program, yielding a higher graduation rate.

4. <u>MITIGATION PLAN AND / OR</u> <u>RECOMMENDATIONS</u>

 There is an aggressive hiring plan to add approximately 60 EMTs per year over the next five years to meet PC&M's Integrated Human Resource Plan staffing goals. Restructuring of the Training Program and an increase in training staff has enabled PSST to move forward with this hiring plan while still maintaining the quality and integrity of the program.

Within Acceptable Variance

Outside Acceptable Variance

Needs Attention

LADWP RATES METRIC - Total Renewable Portfolio Standard (Power)

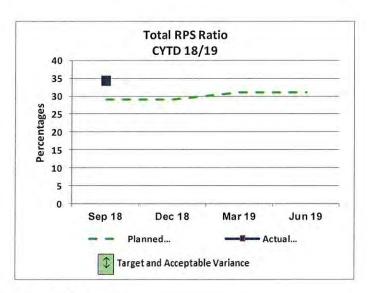
RESPONSIBLE MANAGER: John Giese, Power External Energy Resources

REPORTING PERIOD: October 2018

7

DEFINITION OF RATES METRIC: GWH from RPS Resource/GWH of Retail Sales (State Requirement), In Percentages (%) **TARGET & ACCEPTABLE VARIANCE (FY 18/19):** Target = 29% for calendar year 2018 and 31% for calendar year 2019; Acceptable Variance = ± 3%

STATUS:	Exc	Exceeds Target					
CYTD	Planned	Actual	Variance	Re-Estimate			
as of:	(%)	(%)	%	(If Applicable)			
Sep 18	29.0	34.2	5.2%				
Dec 18	29.0			29.0			
Mar 19	31.0			31.0			
Jun 19	31.0			31.0			
Acceptat	ole Variance		± 3%	0.0%			



SOURCE OF DATA: Wholesale Energy Resource Management Group (KPI # 05.01.01.01)

1. BACKGROUND / PURPOSE

- Los Angeles Department of Water and Power (LADWP) is on target to meet the 33% Renewable Portfolio Standard (RPS) ratio requirement in 2020 and 50% in 2030, as required by the California Energy Commission (CEC).
- RPS portfolio includes Wind, Solar, Geothermal, and Small Hydro.
- To comply with the CEC, RPS percentages are calculated over four years (Compliance Period), not fiscal year or fiscal year-to-date basis.
- There are other RPS-related Rates Metric Reports for Wind, Solar, Biogas, and Geothermal.
- The Biogas contract was cancelled in May 2018.

2. ACHIEVEMENTS / MILESTONES MET

- RPS actuals are currently estimated at 5.2% above target.
- Target may vary slightly due to adjustments in total customer sales and reconciliation activities.

3. <u>PERFORMANCE / VARIANCE ANALYSIS</u> & YEAR END PROJECTION

 Actuals for the second quarter of FY 18/19 will be available in February 2018.

4. <u>MITIGATION PLAN AND / OR</u> <u>RECOMMENDATIONS</u>

- Uncertainty in performance of renewable resources, evolving accounting methods, changing regulations, and transmission disruptions are risk factors that can impact the performance of this metric.
- To meet the RPS goals and avoid the risk of non-compliance with the CEC's RPS requirement, LADWP uses targets (forecasts) above the CEC's RPS ratio requirement. This will provide a hedge against the abovementioned risk factors.
- Excess Renewable Energy Credits from one compliance period can be rolled over into the next compliance period.
- Current Year 2018 soft target per the CEC is 29%. LADWP's RPS compliance percentage is calculated over four years (2017-2020).
- The Whole Energy Resource Management (WERM) is developing a plan for management approval in order to address the excess generation for December 2018.

Exceeds Target

LADWP RATES METRIC - Total RPS Cost vs. Plan, By Wind (Power)

RESPONSIBLE MANAGER: Jan Lukjaniec, Power External Energy Resources , TC REPORTING PERIOD: October 2018

DEFINITION OF RATES METRIC: Total RPS Purchased Power Cost (\$/MWH), Per Power Purchase Agreements (PPA), As Compared To Plan, By Wind

TARGET & ACCEPTABLE VARIANCE (FY 18/19): Target = \$83.87/MWH; Acceptable Variance = ± 15%

STATUS: Within Acceptable Variance

FYTD	Planned	Actual	Vari	ance	Re-Estimate		Total RPS Purchased Power Cost, by Wind
as of:	(\$/MWH)	(\$/MWH)	\$	%		120 -	FY 18/19
Jul-18	83.87	86.63	2.76	3.3%		120	+15
Aug-18	83.87	85.38	1.51	1.8%		100 -	
Sep-18	83.87	86.58	2.71	3.2%		80 -	
Oct-18	83.87	84.87	1.00	1.2%		NH N	-
Nov-18	83.87				83.87	HWW/\$	-159
Dec-18	83.87			(83.87	40 -	and the second se
Jan-19	83.87				83.87		
Feb-19	83.87				83.87	20 -	
Mar-19	83.87				83.87	0 -	 , , , , , , , , , , , , , , , , , , ,
Apr-19	83.87				83.87		118 288, Oct 40, Dec, 381, 685, 481, 891, 991, 991, 991, 991, 991, 991, 9
May-19	83.87			1	83.87	20	40. 30. 0. 40 00 20 60. 40 by 400, 22.
Jun-19	83.87				83.87		Planned Actual
	Accepta	ble Variance	±	15%	0.0%		Target and Acceptable Variance

SOURCE OF DATA: Monthly energy invoice per PPA (KPI # 01.03.01.06)

1. BACKGROUND / PURPOSE

- PPA = Power Purchase Agreement. The energy cost is calculated at plant's "busbar", in dollars per mega-watt-hour (\$/MWH), per executed PPA.
- The aggregated energy costs are the weighted average of seven wind PPAs for which the \$/MWH cost is determined by the seven individual PPAs, but the energy outputs are a function of the individual project's capacity and wind resource availability, which is variable.
- Wind energy supports meeting Renewable Portfolio Standard (RPS) goals. Wind energy is currently estimated to represent 34% of the Calendar Year 2018 RPS portfolio.
- Contributing Projects and Contracted Price:
 - Pleasant Valley \$63.00 /MWh •
 - Willow Creek \$102.32/MWh .
 - Pebble Springs \$69.21 /MWh .
 - Milford Phase I \$81.27/MWh*
 - Milford Phase II \$95.61/MWh*
 - Windy Flats \$98.87/MWh*
 - Manzana .

*Value includes prepay and excess energy cost

Within Acceptable Variance

Outside Acceptable Variance

\$82.50/MWh

2. ACHIEVEMENTS / MILESTONES MET

- PPA projects are performing as expected.
- 3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION
 - Performance of the PPA projects is regularly monitored.
- 4. MITIGATION PLAN AND / OR RECOMMENDATIONS
 - There is no mitigation plan needed at this time.

Exceeds Target

Needs Attention

LADWP RATES METRIC - Total RPS Cost vs. Plan, By Solar (Power)

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RESPONSIBLE MANAGER: Jan Lukjaniec, Power External Energy Resources JV REPORTING PERIOD: October 2018

DEFINITION OF RATES METRIC: Total RPS Purchased Power Cost (\$/MWH), Per Power Purchase Agreements (PPA), As Compared To Plan, By Solar

TARGET & ACCEPTABLE VARIANCE (FY 18/19): Target = \$72.70/MWH; Acceptable Variance = ± 15%

STATUS: Within Acceptable Variance

	Re-Estimate	ance	Varia	Actual	Planned	FYTD	
	1 Marsh	%	\$	(\$/MWH)	(\$/MWH)	as of:	
	1	-0.7%	-0.48	72.22	72.70	Jul-18	
	S	-0.9%	-0.66	72.04	72.70	Aug-18	
		1.6%	1.14	73.84	72.70	Sep-18	
		1.8%	1.29	73.99	72.70	Oct-18	
	72.70				72.70	Nov-18	
	72.70				72.70	Dec-18	
	72.70				72.70	Jan-19	
	72.70				72.70	eb-19	
	72.70	1	1.2.2.1		72.70	/ar-19	
	72.70				72.70	Apr-19	
Ì	72.70				72.70	Nay-19	
	72.70				72.70	Jun-19	
	0.0%	15%	- The	le Variance	Acceptab		

SOURCE OF DATA: Monthly energy invoice per PPA (KPI # 01.03.01.17)

1. BACKGROUND / PURPOSE

- PPA = Power Purchase Agreement. The energy cost is calculated at plant's "busbar", in dollars per mega-watt-hour (\$/MWH), per executed PPA.
- The aggregated energy costs are the weighted average of the solar PPAs for which the \$/MWH cost is fixed by individual PPAs, but the energy outputs are a function of the individual project's capacity and solar resource availability, which is variable.
- Solar energy supports meeting Renewable Portfolio Standard (RPS) goals. Solar energy is currently estimated to represent 39% of the Calendar Year 2018 RPS portfolio.
- Contributing Projects and Contracted Price:
 - Copper Mountain Solar 3 \$95.75 /MWh
 - Springbok 1 Solar \$68.60/MWh
 - Springbok 2 Solar \$58.65 /MWh
 - **RE Barren Ridge** \$65.83/MWh
 - Moapa Southern Paiute \$87.69/MWh
 - Beacon Solar 1 \$50.61/MWh
 - Beacon Solar 2 \$56.06/MWh
 - Beacon Solar 3 \$49.47/MWh

	Beacon Solar 4	\$50.61/MWh
•	Beacon Solar 5	\$57.35/MWh

Jan 19

Target and Acceptable Variance

4-80-19

Aprilo

Actual...

Way

2 Wat

Total RPS Purchased Power Cost, by Solar FY 18/19

9

+15%

-15%

Jun 19 19

2. ACHIEVEMENTS / MILESTONES MET

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Planned...

PPA projects are performing as expected.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

Performance of the PPA projects is . regularly monitored.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

There is no mitigation plan at this point.

LADWP RATES METRIC - Total RPS Cost vs. Plan, By Geothermal (Power)

RESPONSIBLE MANAGER: Jan Lukjaniec, Power and Fuel Purchase

REPORTING PERIOD: October 2018

10

DEFINITION OF RATES METRIC: Total RPS Purchased Power Cost (\$/MWH), Per Power Purchase Agreements (PPA), As Compared To Plan, By Geothermal

TARGET & ACCEPTABLE VARIANCE (FY 18/19): Target = \$81.61/MWH; Acceptable Variance = ± 15%

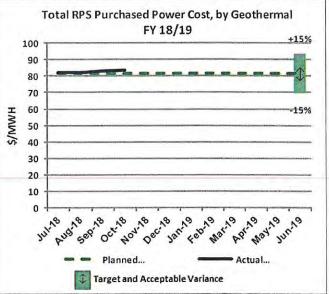
STATUS: Within Acceptable Variance

FYTD	Planned	Actual	Vari	ance	Re-Estimate
as of:	(\$/MWH)	(\$/MWH)	\$	%	
Jul-18	81.61	82.11	0.50	0.6%	
Aug-18	81.61	81.96	0.35	0.4%	
Sep-18	81.61	83.05	1.44	1.8%	
Oct-18	81.61	83.70	2.09	2.6%	
Nov-18	81.61				81.61
Dec-18	81.61				81.61
Jan-19	81.61				81.61
Feb-19	81.61				81.61
Mar-19	81.61				81.61
Apr-19	81.61				81.61
May-19	81.61				81.61
Jun-19	81.61				81.61

SOURCE OF DATA: Monthly energy invoice per PPA (KPI # 01.03.01.18)

1. BACKGROUND / PURPOSE

- PPA = Power Purchase Agreement. The energy cost is calculated at plant's "busbar", in dollars per mega-watt-hour (\$/MWH), per executed PPA.
- The aggregated energy costs are the weighted average of six geothermal PPAs for which the \$/MWH cost is fixed for firm and imbalance energy. However, the energy outputs are a function of the individual project's capacity and geothermal resource availability, which is variable.
- Geothermal energy supports meeting Renewable Portfolio Standard (RPS) goals. Geothermal energy currently represents 21% of the Calendar Year 2018 RPS portfolio.
- Contributing Projects and Contracted Price:
 - Don A Campbell Phase 1 \$99.00/MWh
 - Don A Campbell Phase 2 \$81.25/MWh
 - Hudson Ranch \$85.29/MWh
 - Heber 1 \$81.20/MWh
 - Ormesa Geo Complex \$77.25/MWh
 - ONNGP \$75.50/MWh



2. ACHIEVEMENTS / MILESTONES MET

- PPA projects are performing as expected.
- 3. <u>PERFORMANCE / VARIANCE ANALYSIS</u> <u>& YEAR END PROJECTION</u>
 - Performance of the PPA projects is regularly monitored.
- 4. <u>MITIGATION PLAN AND / OR</u> <u>RECOMMENDATIONS</u>
 - There is no mitigation plan at this time.

+15%

15%

P.Of way

Actual.

DWP RATES METRIC - Total RPS Cost vs. Plan, By Biogas (Power)

120

100

80

40 20

0

AUSIS Jul-18

£

+MM/\$ 60

RESPONSIBLE MANAGER: Jan Lukjaniec, Power External Energy Resources JL REPORTING PERIOD: October 2018

DEFINITION OF RATES METRIC: Total RPS Purchased Power Cost (\$/MWH), Per Power Purchase Agreements (PPA), As Compared To Plan, By Biogas

TARGET & ACCEPTABLE VARIANCE (FY 18/19): Target = \$84.36/MWH; Acceptable Variance = ± 15%

STATUS:	Ex	ceeds Targe	ət]	
FYTD	Planned	Actual	Vari	ance	Re-Estimate
as of:	(\$/MWH)	(\$/MWH)	\$	%	
Jul-18	84.36	0	-84.36	-100.0%	
Aug-18	84.36	0	-84.36	-100.0%	
Sep-18	84.36	0	-84.36	-100.0%	
Oct-18	84.36	0	-84.36	-100.0%	
Nov-18	84.36				0.00
Dec-18	84.36				0.00
Jan-19	84.36				0.00
Feb-19	84.36				0.00
Mar-19	84.36				0.00
Apr-19	84.36		1		0.00
May-19	84.36		1		0.00
Jun-19	84.36				0.00
	Accepta	ble Variance	<u>+</u>	15%	0.0%

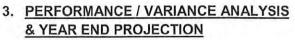
SOURCE OF DATA: Monthly energy invoice per PPA (KPI # 01.03.01.19)

1. BACKGROUND / PURPOSE

- Biogas fuel supports meeting Renewable Portfolio Standards (RPS) goals.
- Biogas fuel is currently estimated to represent 0% of the Calendar Year 2018 **RPS** portfolio.
- The contract for Biogas was cancelled effective May 1, 2018. All actuals after May 1, 2018, will be zero.
- The decision to end this contract results in a gross savings of \$90 million to ratepayers.

2. ACHIEVEMENTS / MILESTONES MET

- No fuel was purchased or delivered since May 2018.
- Currently, there are no plans to enter into future biogas contracts.



Dec

Target and Acceptable Variance

Total RPS Purchased Power Cost, by Biogas FY 18/19

Actuals will remain at zero.

OCUNS 404.18

Planned..

20 Sep

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

There is no mitigation plan at this time.

LADWP RATES METRIC – Average Levelized Cost of Energy For Purchased Power Agreements (Power)

RESPONSIBLE MANAGER: Jan Lukjaniec, Power External Energy Resources **DEFINITION OF RATES METRIC:** Cost Per MWH For All Power Purchase Agreements (PPA) Signed During The <u>Previous</u> Fiscal Year **TARGET & ACCEPTABLE VARIANCE (FY 18/19):** Target = \$97.50/MWH; Acceptable Variance = ± 15%

FYTD	Planned	Actual	Vari	ance	Re-Estimate		Average Levelized Cost of Energy for PPAs
as of:	(\$/MWH)	(\$/MWH)	\$	%		120 ד	FY 18/19 +1
Jul-18	97.50	97.50	0.00	0.0%			
Aug-18	97.50	97.50	0.00	0.0%		• 100 -	
Sep-18	97.50	97.50	0.00	0.0%		80 -	
Oct-18	97.50	97.50	0.00	0.0%		HWM/\$	-1!
Nov-18	97.50				97.50	NW/S	
Dec-18	97.50				97.50	40 -	
Jan-19	97.50				97.50	20 -	
Feb-19	97.50				97.50	20	
Mar-19	97.50				97.50	0 -	
Apr-19	97.50				97.50		" And see to ce to the ran been sende to have been and survey
May-19	97.50		1		97.50	3	
Jun-19	97.50			·	97.50		- Planned Actual
	Accepta	ble Variance	±	15%	0.0%		Target and Acceptable Variance

SOURCE OF DATA: Monthly RPS Report from "RPS Development Group" (KPI # 01.03.01.07)

1. BACKGROUND / PURPOSE

- PPA = Power Purchase Agreement. The energy cost is calculated at plant's "busbar", in dollars per mega-watt-hour (\$/MWH), per executed PPA.
- The PPAs support meeting RPS goals.

2. ACHIEVEMENTS / MILESTONES MET

 During Fiscal Year 17/18, one Biomass PPAs was executed on April 30, 2018 – American Renewable Power (ARP) -Loyalton Biomass Project. The project allowed LADWP to meet the requirements of Senate Bill 859, which mandates the use of biomass energy.

3. <u>PERFORMANCE / VARIANCE ANALYSIS</u> <u>& YEAR END PROJECTION</u>

• PPA project is performing as expected.

4. <u>MITIGATION PLAN AND / OR</u> <u>RECOMMENDATIONS</u>

- The metric will not change on a monthly basis as it is a comparison of the weighted average of prices of PPAs signed in individual fiscal years, and therefore, a monthly mitigation plan is not necessary.
- Once future fiscal years occur, a comparison of the weighted average of prices of PPAs signed in individual fiscal years can be performed and potential recommendations will be made.

Exceeds Target

RESPONSIBLE MANAGER: Robert Fick, Power Supply Operations Reporting PERIOD: October 2018

DEFINITION OF RATES METRIC: Board Approved Annual Budget vs. Actual Expenditures For PSRP Generation, Capital TARGET & ACCEPTABLE VARIANCE (FY 18/19): Target = \$20,262.2K; Acceptable Variance = ± 15%

STATUS:	Within Ac	ceptable Va	riance			
FYTD	Approved Budget	Actual	Varia	nce	Re-Estimate	
as of:	(\$ in K)	(S in K)	\$ in K	%	(If Applicable)	
Jul-18	1,400.0	1,853.0	453.0	32.4%	· · · · · · · · · · · · · · · · · · ·	
Aug-18	2,800.0	3,193.0	393.0	14.0%	1	
Sep-18	4,200.0	4,715.0	515.0	12.3%		
Oct-18	5,600.0	6,016.0	416.0	7.4%		2
Nov-18	7,000.0				9,851.7	1:4
Dec-18	8,400.0				11,822.0	
Jan-19	9,800.0	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	1/		13,792.3	
Feb-19	11,200.0	n finis			15,762.7	
Mar-19	12,600.0				17,733.0	
Apr-19	15,000.0	1 I.			19,703.3	
May-19	17,400.0				21,673.7	
Jun-19	20,262.2				23,644.0	
	Acceptab	le Variance	+ 1	5%	14.2%	

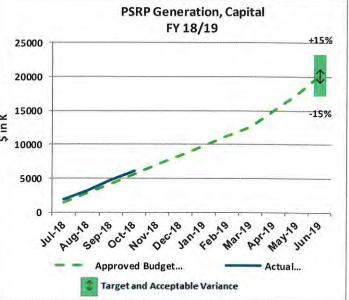
SOURCE OF DATA: FI 21186 (KPI # 01.03.01.08)

1. BACKGROUND / PURPOSE

This metric measures the planned vs. actual expenditures for Generation capital activities, including major unit overhauls, transformer replacements, and replacement of a 6MW hydro power plant. These activities will ensure safety and maximize reliability, availability, efficiency, and extend the life of generating assets.

ACHIEVEMENTS / MILESTONES MET 2.

- Castaic Power Plant (CPP) Completed weld repair of the stator lamination brackets and installation of new stator nuts in September; Continued installation of turbine shut-off valve (TSOV) assembly; Head cover was lowered and sitting on wicket gate stems in October. 70% completion.
- CPP Unit 2 Main Bank Transformers Performed initial testing and inspection in August in preparation to install. The existing transformer was taken out of service for removal in October. The new transformer will be set in place in November. 76% completed.
- CPP Station Service Transformer 3 Issued construction work package for industrial water line relocation in August, and a revised construction work package for the oil containment area in October. Industrial water line relocation work is continuing, with construction of the new station service transformer pad to start after. Installation of Station Service 3 will commence after Unit 2 bank installation is complete. 27% completed.
- San Fernando Power Plant Generator Step-Up Transformer - Procured two more pressure relief devices after verified fit and tested the first refurbished transformer with acceptable results in September. Completed repair of first transformer and tested high voltage bushings in October. Overhaul of second transformer overhaul work continues. 33% completed.



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

- The FI is currently within the acceptable variance range.
- The \$416K overrun is primarily due to CPP Major Overhaul work. This project is overrun by \$846K due to extensive repairs on U4 to the turbine shut-off valve, and the work to resolve the stator migration issues that were not discovered until after an assessment was conducted. Unit 4's Estimated-to-Return 1st Quarter 2019.
- The overrun from the CPP Major Overhaul project is partially offset by underruns in PSRP emergency repairs and the San Fernando Power Plant project, which has been delayed pending an assessment of the existing building, including powerhouse and generators. Restoration of Unit 1 delayed due to lack of engineering resources.
- The transformer replacement project is anticipated to be \$2.6M over the approved budget. The increase is primarily due to labor costs for the installation of Unit 2 Main Bank Transformer and material costs for the purchase of Station Service 2 and 3 transformers.

	Total Project Approved From
\$344.3	Inception to FY26/27
\$249.7	Total Project Estimates
\$78.9	Projects Approved to Date
\$63.5	Project Actuals to Date

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

Coordinate with Mechanical Repair Services for CPP Unit Overhaul work.

Within Acceptable Variance

Outside Acceptable Variance

LADWP RATES METRIC - PSRP Transmission, Capital (Power)

 RESPONSIBLE MANAGER: John Hormozi, Power Transmission & Distribution Division
 REPORTING PERIOD: October 2018

 DEFINITION OF RATES METRIC: Board Approved Annual Budget vs. Actual Expenditures For PSRP Transmission, Capital

 TARGET & ACCEPTABLE VARIANCE (FY 18/19): Target = \$84,368.6K; Acceptable Variance = ± 15%

STATUS: Outside Acceptable Variance

FYTD	Approved Budget	Actual	Varia	ance	Re-Estimate		PSRP Transmission, Capital
as of:	(\$ in K)	(\$ in K)	\$ in K	%		120000 -	FY 18/19
Jul-18	5,484.0	13,252.0	7,768.0	141.6%			+
Aug-18	10,968.0	25,755.0	14,787.0	134.8%		100000	
Sep-18	16,452.0	35,737.0	19,285.0	117.2%		80000	
Oct-18	21,936.0	30,178.0	8,242.0	37.6%		×	
Nov-18	27,420.0		1		45,000.0	.⊑ 60000 -	
Dec-18	33,747.6				49,000.0	40000	
Jan-19	42,184.5				54,000.0] 20000	C
Feb-19	50,621.4		L		60,000.0	20000 -	1
Mar-19	59,058.2				71,000.0	0	
Apr-19	67,495.0				81,000.0	Juli	5 10 50 10 10 10 000 10 10 10 10 10 10 10 10 1
May-19	75,931.8				98,000.0		
Jun-19	84,368.6				117,624.0		Actual
Acceptable Variance ± 15%					39.4%		Target and Acceptable Variance

SOURCE OF DATA: FI 21212 (KPI # 01.03.01.10).

1. BACKGROUND / PURPOSE

Expenditures for various Power System Reliability Program transmission capital projects. Includes overhead and underground transmission projects and annual improvements.

2. ACHIEVEMENTS / MILESTONES

- 138-kV Fairfax-Olympic Cable B replacement inservice 7/2018; Cable A in-service 11/2018.
- 230-kV Scattergood-Olympic Cable A in-service 7/2018.
- Sylmar Ground Return System Replacement Project in-service 11/2018.

3. <u>PERFORMANCE / VARIANCE ANALYSIS</u> <u>& YEAR END PROJECTION</u>

- Includes charges for work on Jobs O1373 (Sylmar Filter Replacement Project) & B1220 (Sylmar Ground Return System Replacement Project), which are 60% reimbursable by others. Since reimbursements come in some time after LADWP sends out invoices for work already performed, monthly net expenditures on these two jobs do not necessarily reflect work performed in that given month.
- On B1220 (\$11.9M over YTD budget), some expenditures are for work originally budgeted for FY 17/18; most of this is for contract deliverables for the Ocean portion of the Electrode circuit. Budget-wise, the entire job is roughly 85% complete, so the budget should "catch up" with actual net expenditures by the end of FY 18/19.
- On O1373 (\$18.8M over YTD budget), accelerated construction efforts are bringing the job back on schedule by the end of December 2018, after which the accumulation of net expenditures (counting

invoices and reimbursements) should slow down and may even shrink.

- Money not sufficiently budgeted for O9805 (Upgrade Valley-Rinaldi 230-kV Lines 1 and 2), so normal project progress appears as an overrun (by \$2.4M, YTD). The same goes for O9806 (Upgrade Valley-Toluca 230-kV Lines 1 and 2), whose overrun is \$3.2M, YTD.
- October's net expenditure dip likely due to reimbursement receipts. Anticipating further reimbursement receipts to offset, in part, recent large contract invoice payments. Also, Jobs B1220 and O1346 (Scattergood-Olympic Cable A) substantially completed during the first half of FY18/19.
- The individual Job Managers have re-estimated their FY 18/19 expenditures to an aggregate of \$117,624K for the FI as a whole. FYE actuals for this FI are now forecast to fall somewhere between the budgeted and re-estimated figures above.
- FI 21212 includes Annual (perpetual) jobs, so a single FI Estimated Lifetime Expenditure does not apply.

Total Project Approved From	122.2.2
Inception to FY 26/27	\$1,472.0M
Projects Approved to Date	\$907.8M
Project Actuals to Date	\$623.2M

Amounts include AFUDC but exclude REIMB.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

Support progress on these jobs according to the respective job managers' milestone schedules for this FY; actual cumulative spending is drawing near YTD estimates as the FY continues.

Needs Attention

15 DWP RATES METRIC - PSRP Transmission, O&M (Power)

RESPONSIBLE MANAGER: Terry Jackson, Power Transmission and Distribution

REPORTING PERIOD: Oct 2018 DEFINITION OF RATES METRIC: Board Approved Annual Budget vs. Actual Expenditures For PSRP Transmission, O&M TARGET & ACCEPTABLE VARIANCE (FY 18/19): Target = \$34,299K; Acceptable Variance = ± 15%

YTD s of:	Approved Budget	Actual	Varia	ince	Re-Estimate		PSRP T	ransmission, O&M
15 01.	(\$ in K)	(S in K)	\$ in K	%		45000		FY 17/18
ul-17	2,789	1,888	-901.0	-32.3%		45000		
ug-17	8,095	5,227	-2,868.0	-35.4%		35000		
ep-17	9,284	7,832	-1,452.0	-15.6%		30000		
ct-17	12,184	9,738	-2,446.0	-20.1%				
ov-17	14,313				12,958	¥ 25000		
ec-17	16,836				16,178	15000		
an-18	19,190				19,398	10000		
eb-18	21,756				22,619	5000	1	
lar-18	24,017				25,839	0		s (1 1 3
pr-18	28,788				29,059	Julia	1917 500 OCT NOW D	ec. Jan Feb Mar Apr
ay-18	31,622				32,279	20 1	n. 30, 00 40, 0	e. 78. te. Mg. bb.
un-18	34,299				35,499	-	 Approved Bud 	get 🦰 🖊
	Acceptabl	e Variance	±	15%	3.5%		Target and Ac	ceptable Variance

SOURCE OF DATA: FI 301-3132 (KPI # 01.03.01.11)

1. BACKGROUND / PURPOSE

To maintain facilities generally consisting of overhead and underground high voltage electric circuitry used to transport electricity in bulk quantities from generation facilities to distribution facilities over long distances for system reliability. Power Transmission & Distribution (PTD) operates and maintains overhead transmission lines extending over 6,400 circuit miles throughout the Western United States and another 120 miles of underground transmission in the Los Angeles area.

2. ACHIEVEMENTS / MILESTONES MET

Power System Reliability Program (PSRP) aides in the hardening and replacement of critical infrastructure.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- Underrun in job B1275 (Operation of Sylmar Converter Station East), CE 61 (Insurance), is primarily due to the timing of the major renewals; the Property Insurance Program renews in November 2018 and the Excess Liability Insurance Program renews in April 2019.
- Charges for work in jobs B1275 and B1280 (Operations/Maintenance of Sylmar Converter Stations East) which are reimbursable by DWP Partners. Incoming reimbursements caused some inconsistencies in reported net expenditures including some months with negative expenditures.

Within Acceptable Variance

Exceeds Target

Underrun in job B1232 (Overhead Transmission

Lines Operations and Maintenance) is a result of Overhead Transmission Crews working on capital

projects to upgrade transmission system reliability.

Reimbursement estimates, in jobs B1275 and

aniticipated to be received by DWP Partners.

B1280, have been updated to be more in line with

current and fiscal year-end (FYE) reimbursements

Transmission Line operations and maintenance, job B1232, work is scheduled to resume in last quarter

of 2019, increasing expeditures and bringing them

more in line with the approved budget by fiscal year-

4. MITIGATION PLAN AND / OR

RECOMMENDATIONS

end (FYE).

LADWP RATES METRIC – *Cost Per Circuit Mile For Underground Circuits (Power)*

RESPONSIBLE MANAGER: Silvia Lozano

REPORTING PERIOD: Oct 2018

16

Silvia Lozano Shra Gorguno Power Planning, Development, and Engineering Division DEFINITION OF RATES METRIC: Cost Per Circuit Mile For Underground Circuits

TARGET & ACCEPTABLE VARIANCE (FY 18/19): Target = \$2.8M per mile; Acceptable Variance = ± 15%

STATUS

Within Acceptable Variance

Within Acceptable Variance

	Start	Finish	4Q FY17/18	1Q FY18/19	2Q FY18/19	3Q FY18/19	4Q FY18/19
Fairfax-Olympic Cable A	7/23/2018	11/16/2018	••			223	
Scattergood-Airport Line 1	11/19/2018	3/5/2019	ļ.		•		
Scattergood-Airport Line 2	3/6/2019	6/12/2019				•	

SOURCE OF DATA: Job B1062 (KPI # 01.03.01.12)

BACKGROUND / PURPOSE

- This is a 5-year project to replace ten (10) aging 138kV underground transmission circuits for power system reliability. The cost of the project includes the contract price to replace the ten (10) circuits by contractors and the cost of two stations per circuit installed by in-house crew. The contract price for the circuit replacement varies from \$2.2 to \$4.5 million (M)/mile excluding contingencies, and the length of each circuit ranges from 2.5 to 5.9 miles. The ten (10) circuits included in this project are:
 - 0 Fairfax-Airport Line 1, 2.56 miles
 - Fairfax-Airport Line 2, 2.52 miles 0
 - Fairfax-Gramercy Line 1, 5.59 miles (Completed 0 in FY16/17)
 - Fairfax-Gramercy Line 2, 5.6 miles (Completed in 0 FY17/18)
 - Fairfax-Olympic Cable A, 5.89 miles (On-going) 0
 - Fairfax-Olympic Cable B, 5.87 miles (Completed 0 in July 2018)
 - Scattergood-Airport Line 1, 5.05 miles 0 (Scheduled for 11/19/18 to 3/5/19)
 - Scattergood-Airport Line 2, 5.04 miles 0 (Scheduled for 3/6/19 to 6/12/19)
 - 0 Tarzana-Olympic Line 1A, 3.21 miles
 - Tarzana-Olympic Line 1B, 3.21 miles 0

2. ACHIEVEMENTS / MILESTONES MET

- Fairfax-Olympic Cable B was energized on July 14, 2018.
- Replacement for Fairfax-Olympic Cable A started on 7/23/18 with an estimated in-service date of 11/16/18. 92.5% has been completed to date.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

	Types	Target	Actuals/ Trending Cost ²	Variance (%)	
FY16/17	Contract Cost	\$2.7M/mile1	\$2.6M/mile	-3.7%	
F110/17	Station Cost		\$0.6M/mile		
FY17/18	Contract Cost	\$2.5M/mile	\$2.3M/mile	1400/	
	Station Cost		\$0.5M/mile	+12%	
FY18/19	Contract Cost	\$2.8M/mile	\$2.4M/mile ²	00/	
(YTD)	Station Cost	φz.oivi/mile	\$0,4M/mile ²	0%	

1. \$2.7M/mile target was based on the total contract cost for the replacement of 10 circuits. It was reforecast to \$2.9M/mile due to the use of larger cable to increase the line operating capacity.

- 2. Trending costs are costs incurred year-to-date while the circuit replacement is still on-going.
- Because the actual cost per circuit mile will only be available upon completion of the circuit replacement, which may not fall within the current fiscal year, "trending costs" are provided if the final actuals are not available.
- The actual cost per circuit mile may vary significantly each year depending on the circuits to be replaced and the need to use the contingency provisions of the contract.
- Two (2) contract invoices totaling \$5.0M were paid in October, bringing the current trending cost for FY 18/19 to approximately \$2.8M/mile.
- Although the current trending cost/mile is on par with this FY's target, the trending cost/mile will likely increase in November as the last invoice for Fairfax-Olympic Cable A will be due upon the circuit's completion. However, it is anticipated that the actual cost per mile will be within the acceptable variance of the re-forecasted target of \$2.9M/mile for all ten (10) circuits.

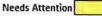
4. MITIGATION PLAN AND / OR RECOMMENDATIONS

There is no mitigation plan at this time.

Within Acceptable Variance

Outside Acceptable Variance

Exceeds Target



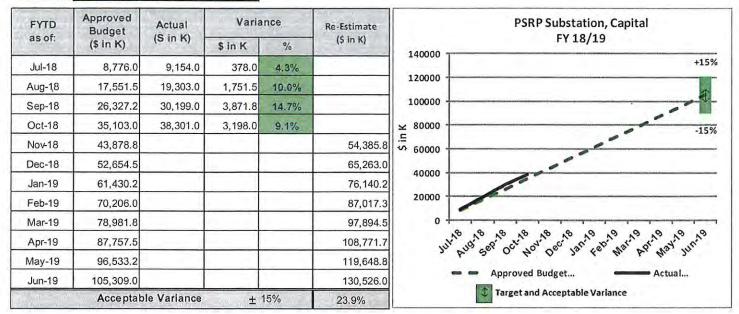
LADWP RATES METRIC - PSRP Substation, Capital (Power)

RESPONSIBLE MANAGER: Jason Hills Jh Power Planning, Development, and Engineering Division

REPORTING PERIOD: October 2018

DEFINITION OF RATES METRIC: Board Approved Annual Budget vs. Actual Expenditures For PSRP Substation, Capital TARGET & ACCEPTABLE VARIANCE (FY 18/19): Target = \$105,309K; Acceptable Variance = ± 15%

STATUS: Within Acceptable Variance



SOURCE OF DATA: FI 21195 (KPI # 01.03.01.13).

1. BACKGROUND / PURPOSE

Substation life extension, expansions, upgrades and . equipment replacements (transformers, circuit breakers, batteries, etc.) to improve substation reliability, availability and capacity.

2. **ACHIEVEMENTS / MILESTONES**

- Completed station work for Scattergood-Olympic Cable A in July.
- Completed nine (9) feeder jobs four (4) feeders in July; three (3) in September, and two (2) in October.
- Completed three (3) Distributing Station (DS) bank life . extensions - DS-107 Bank 1 in July; DS-107 Bank 2 and DS-20 Bank 1 in September.
- Completed forty-nine (49) 34.5kV Circuit Breaker (CB) life extensions - ten (10) 34.5kV CB life extensions in July; nineteen (19) in August; sixteen (16) in September; four (4) in October.
- Completed five (5) 34.5kV CB replacements One (1) ۰ 34.5kV CB replacement in August; two (2) in September; two (2) in October.
- Completed two (2) 4.8kV CB replacements in October.
- Completed RS-H Bank D replacement in August.
- Issued Construction Work Packages (CWPs) for twenty-nine (29) 4.8kV CB replacements - one (1) 4.8kV CB replacement at DS-5 and twenty-eight (28) at DS-74 in September.
- Issued CWPs for DS-2 Bank 3 replacement and DS-39 Bank 2 upgrade in October.
- Issued CWPs for RS-E new shunt reactor and RS-E Bank H (C-phase) in October.

PERFORMANCE / VARIANCE ANALYSIS & YEAR END 3. PROJECTION

- The overrun is primarily caused by \$6.4M overspending on Substation Automation Systems (SAS) contracts due to insufficient funding in the approved budget.
- Though construction labor resources are insufficient to progress station bank and CB replacements; bank replacements are delayed at RS-E, RS-B, and RS-M, and bank replacement jobs are deferred at RS-K and RS-N, this Functional Item (FI) is estimated to have a Fiscal Year End overrun of 23.9% largely due to the unbudgeted SAS work.
- FI 211-95 includes Annual (perpetual) jobs, so single estimated lifetime expenditure does not apply.

Total Project Approved From	
Inception to FY26/27	\$2,403.7M
Project Approved to Date	\$1,198.8M
Project Actuals to Date	\$1,072.5M

MITIGATION PLAN AND / OR RECOMMENDATIONS 4

- Convened bi-monthly Power System Resiliency
- Planning, Design, Construction, and Commissioning meetings necessary to elevate priority of substation reliability jobs.
- Continue to progress most other Substation Power System Reliability Program jobs as resources allow.

Outside Acceptable Variance

LADWP RATES METRIC - PSRP Substation, O&M (Power)

RESPONSIBLE MANAGER: Marciano Navar, Power Construction & Maintenance REPORTING PERIOD: October 2018 DEFINITION OF RATES METRIC: Budget Approved Annual Budget vs. Actual Expenditures For PSRP Substation, O&M TARGET & ACCEPTABLE VARIANCE (FY 18/19): Target = \$66,290K; Acceptable Variance = ± 15%

STATUS: Within Acceptable Variance

FYTD	Approved Budget	Actual	Varia	nce	Re-Estimate
as of:	(\$ in K)	(S in K)	\$ in K	%	
Jul-18	5,524.00	5,631.0	107.0	1.9%	
Aug-18	11,048.40	11,165.0	116.6	1.1%	
Sep-18	16,572.60	17,794.0	1,221.4	7.4%	
Oct-18	22,096.80	23,557.0	1,460.2	6.6%	
Nov-18	27,621.00				28,313.8
Dec-18	33,145.20				33,976.4
Jan-19	38,689.40				39,639.0
Feb-19	44,193.60				45,301.6
Mar-19	49,717.80				50,964.2
Apr-19	55,242.00	· · · · · · · · · · · · · · · · · · ·			56,626.8
May-19	60,766.20				62,289.4
Jun-19	66,290.40				67,952.0
	Acceptal	ole Variance	±	15%	2.5%

SOURCE OF DATA: FI 301-3201 (KPI # 01.03.01.14)

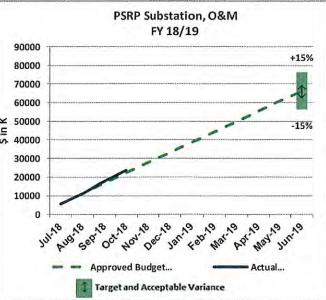
1. BACKGROUND/PURPOSE

 Substation operations and maintenance (O&M) activities are a critical component in the Department's ability to provide continued safe and reliable power. This metric measures the planned vs. actual expenditures for O&M activities for Substation Operations in the Metro, West Los Angeles/South Los Angeles, and Valley areas, including the switching and maintenance of communication equipment.

2. ACHIEVEMENTS/MILESTONES MET

- See attached Supplemental Summary for the monthly breakdown of restorations and work completed.
- Electrical Station Maintenance (ESM) serves as facility manager of over 5000 facilities in the Los Angeles basin and is responsible for maintenance and for staying in compliance with California Public Utility Commission (CPUC) regulatory obligations. As part of this compliance, ESM performs inspections for all facilities as required by CPUC. For example, CPUC General Order 174 requires that ESM perform monthly inspections on all Distributing Stations on a monthly basis.

3. <u>PERFORMANCE/VARIANCE ANALYSIS & YEAR END</u> <u>PROJECTION</u>



- Overspending for the month of July was due to the quarterly inventory of SF6 gas. The California Air Resource Board (CARB) requires that SF6, a regulated gas, be inventoried and reported on a quarterly basis. ESM is responsible for the gas quantity for LADWP at the equipment level and at the ESM facility storage level. This inventory is reported quarterly for key performance indicators and to insure compliance.
- Overspending in August was reduced by .8%. This is mainly due to no quarterly regulatory work scheduled for August.
- Overspending in September was primarily due to emergency responses and maintenance activities at several Distribution Stations (DS). ESM responded to three separate transformer relay incidents; DS-10 Bank 3, DS-12 Banks 1 & 2, and RS-C Bank B. ESM also spent a significant amount of time performing maintenance and repair work on the main air systems at several DS's. In September, Electrical Mechanic Trainees (EMTs) assigned to the ESM spent an increased amount of time working on O&M projects over Capital work.
- Overspending in October was primarily due to emergency responses and maintenance activities at Distribution Stations. ESM responded to a transformer relay at RS-D and a flashover incident at DS-25. ESM also increased Station Battery

Exceeds Target

testing. In October, EMTs in ESM continued to spend an increased amount of time working on O&M projects over Capital work.

4. MITIGATION PLAN AND/OR RECOMMENDATIONS

• The year-to-date variance is due to increases in emergency response issues and we re-estimates were made to the budget, which are reflected in October, to account for the increase in emergencies due to the continued issues caused by the hot weather.



ACHIEVEMENTS / MILESTONES MET

The following table details the monthly breakdown of Substation O&M activity, since JULY 2018.

	JULY 2018	AUG 2018	SEPT 2018	OCT 2018	NOV 2018	DEC 2018	JAN 2019	FEB 2019	MAR 2019	APR 2019	MAY 2019	JUNE 2019	TOTAL
NO. OF RESTORATIONS OF CUSTOMER CIRCUITS:		i.								10			
Receiving Stations (RS) Circuit Outages	58	47	36	45									186
Distributing Station (DS) Circuit Outages	113	76	64	90									343
5-kV Circuit Grounds	76	44	23	65									208
NO. OF INSULATOR WASHINGS:												Sec. a	
Generating Stations	0	0	0	0	12								0
Receiving Stations	4	7	8	5			-						24
Distributing Stations	7	7	7	10									31

*Scattergood GS 230-kV equipment was washed in July 2017.

LADWP RATES METRIC - PSRP Distribution, Capital (Power)

RESPONSIBLE MANAGER: Sager Farraj

Power Planning, Development, and Engineering Division

DEFINITION OF RATES METRIC: Board Approved Annual Budget vs. Actual Expenditures For PSRP Distribution, Capital **TARGET & ACCEPTABLE VARIANCE (FY 18/19)**: Target = \$265,222.4K; Acceptable Variance = ± 15%

STATUS: Within Acceptable Variance

FYTD	Approved Budget	Actual	Varia	nce	Re-Estimate	PSRP Distribution,
as of:	(\$ in K)	(\$ in K)	\$ in K	%	and the second	FY 18/19
Jul-18	22,101.8	22,774.0	672.2	3.0%		
Aug-18	44,203.6	49,129.0	4,925.4	11.1%		300000
Sep-18	66,305.4	74,825.0	8,519.6	12.8%		250000
Oct-18	88,407.2	96,083.0	7,675.8	8.7%		× 200000
Nov-18	110,509.1				124,939.9	.5 \$\$150000
Dec-18	132,611.0	? — — —			153,796.6	100000
Jan-19	154,712.9				182,653.6	50000
-eb-19	176,814.8	1			211,510.5	
Mar-19	198,916.7				240,367.4	<u>, , , , , , , , ,</u> 0 א פי פי פי פי פי פי
Apr-19	221,018.6				269,224.3	Jay & Dag Bed Oc. You you and the you
Aay-19	243,120.5				298,081.1	- Approved Budget
lun-19	265,222.4				326,938.0	Target and Acceptable Varia
	Acceptal	ble Variance	± 1	15%	23.3%	

SOURCE OF DATA: FI 21190 (KPI # 01.03.01.15)

1. BACKGROUND / PURPOSE

- Table above is a summary of expenditures for all Power System Reliability Program distribution capital projects.
- Below is the approved budget % of four major functions:
 - o Transformers: 6.0% (Jobs P6309 & P6394)
 - o Poles: 34.1% (Job P6322)
 - o Crossarms: 9.3% (Job P6318)
 - o Cables: 14.2% (Job P6306)

2. ACHIEVEMENTS / MILESTONES MET

- The Distribution Reliability spent 109% of the budget through the month of October to complete the following:
 - New rack & bank installation RS-Rinaldi, RS-H & RS-B
 - o 602 transformer installations
 - o 1,309 pole replacements
 - o 2,983 deteriorated crossarm replacements
 - o 13.1 circuit-miles of cable replacements
 - 3,230 FIX-IT tickets (Jobs P6318, P6322, P6394, P6306, P6309 & O1357)
 - Work continued on Owens Valleyoverhead/underground installations & removals, asbestos removals, trouble ticket repairs & service restorations due to outages

3. <u>PERFORMANCE / VARIANCE ANALYSIS</u> <u>& YEAR END PROJECTION</u>

 Variance through the month of October is \$7,675.8K, 8.7% over budget. This overrun is primarily caused by the electric service restoration resulted from the July heat wave as well as the accelerated work on cable replacements and pole replacements from the Power System Reliability Program (PSRP) distribution capital projects.

REPORTING PERIOD: October 2018

Total Project Approved From	The state and
Inception to FY25/26	5,424.9M
Projects Approved to Date	2,392.3M
Project Actuals to Date	2,238.4M

Note: The total project estimates cannot be calculated as this is an ongoing project.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

 Actual is above approved due to Districts crews focusing on Power System Reliability Program distribution capital projects including the deteriorated pole replacement, cable replacement backlog, as well as electric service restoration work due to the July heat wave. No mitigation plan at this point.

LADWP RATES METRIC - PSRP Distribution, O&M (Power)

 RESPONSIBLE MANAGER: Mike Barkhuff, Power Fransmission and Distribution
 REPORTING PERIOD: October 2018

 DEFINITION OF RATES METRIC: Board Approved Annual Budget vs. Actual Expenditures For PSRP Distribution, O&M

 TARGET & ACCEPTABLE VARIANCE (FY 18/19): Target = \$147,021K; Acceptable Variance = ± 15%

FYTD	Approved Budget	Actual	Varia	ince	Re-Estimate	PSRP Distribution, O&M
as of:	(\$ in K)	(\$ in K)	\$ in K	%	(If Applicable)	FY 18/19
Jul-18	11,285	10,889	-396.0	-3.5%		160000
Aug-18	22,302	23,734	1,432.0	6.4%		140000
Sep-18	34,221	38,028	3,807.0	11.1%		120000
Oct-18	46,083	51,800	5,717.0	12.4%		¥100000
Nov-18	56,871				63,998	·드 80000
Dec-18	68,790				75,917	60000
Jan-19	81,045		()		88,172	40000
Feb-19	93,104				100,231	20000
Mar-19	107,519				114,646	0
Apr-19	120,893				128,020	711 Prof. 380, Oct. Nov. Dec. 281, 691, 491, 641, 491, 5
May-19	133,257				140,384	
Jun-19	147,021		1		154,148	- Approved Budget Actual.
100	Acceptabl	e Variance	±	15%	4.8%	Target and Acceptable Variance

SOURCE OF DATA: FI 301-3104 (KPI # 01.03.01.16)

1. BACKGROUND / PURPOSE

 To maintain Distribution-voltages of 34.5 kV and below on overhead and underground facilities which carries electricity from Receiving Stations (RS) and Distributing Stations (DS) to the customers for system reliability. There are over 6,800 miles of overhead and 3,597 miles of underground distribution facilities.

2. ACHIEVEMENTS / MILESTONES MET

• Power System Reliability Program (PSRP) aides in the hardening and replacement of critical infrastructure.

3. <u>PERFORMANCE / VARIANCE ANALYSIS</u> & YEAR END PROJECTION

 This KPI was within its 15% threshold set for its goal. Currently, the FI is projected to be within the acceptable variance threshold of the approved budget, \$147,021, by FYE.

4. <u>MITIGATION PLAN AND / OR</u> RECOMMENDATIONS

• There is no mitigation plan at this time.

LADWP RATES/EQUITY METRIC - Transformer Replacement (Power)

RESPONSIBLE MANAGER: Mike Barkhuff, Power Transmission and Distribution EQUITY CORE CATEGORY: Water and Power Infrastructure Investment

REPORTING PERIOD: October 2018

21

DEFINITION OF RATES METRIC: Number of Transformers Replaced Against Plan **TARGET & ACCEPTABLE VARIANCE (FY 18/19):** Target = 800; Acceptable Variance = ± 15%

Exceeds Target STATUS: Variance **Transformer Replacement** FYTD Planned Actual **Re-Estimate** FY 18/19 as of: (No.) (No.) No. % 15% 1000 Jul-18 100 126 26 26.0% 900 800 Aug-18 180 363 183 101.7% No. of Transformers 700 Sep-18 250 518 268 107.2% 600 Oct-18 350 602 252 72.0% 500 Nov-18 400 500 400 Dec-18 450 550 300 525 600 Jan-19 200 600 625 100 Feb-19 0 Mar-19 650 650 Septe oct.18 404.18 Decile 1211.19 +00.10 Jul-18 18 Jun AUS Apr-19 700 700 May-19 750 750 Planned... Actual... Jun-19 800 800 T Target and Acceptable Variance Acceptable Variance ± 15% 0.0%

SOURCE OF DATA: Jobs P6394/P6309 (KPI # 04.01.01.02)

1. BACKGROUND / PURPOSE

 Replace 800 distribution transformers to increase reliability and maintain compliance with California Public Utilities Commission (CPUC) General Order 165- Inspection Cycles for Electric Distribution Facilities. Power Transmission and Distribution (PTD) maintains more than 126,000 distribution transformers. This work is required to provide customers reliable power and a better customer experience. Work is completed by Distribution Construction & Maintenance (DC&M) district or contract crews and is related to Power System Reliability Program (PSRP).

2. CRITERIA

 Transformer replacements are identified through DC&M inspection programs or due to transformer failures or are at risk of failing.

3. ACHIEVEMENTS / MILESTONES MET

 To date, the target was to replace 350 transformers and the current actual number of transformers replaced is 602.

4. <u>PERFORMANCE / VARIANCE ANALYSIS</u> <u>& YEAR END PROJECTION</u>

The actual number of transformers replaced exceeds the 15% threshold set for the monthly target.

5. <u>MITIGATION PLAN AND / OR</u> <u>RECOMMENDATIONS</u>

• The variance overrun is due to the districts concentration on the lists of overloaded transformers received from engineering, as well as the transformers replaced due to the July 2018 heat storm. The number of transformer replacements will continue to decline.

6. OUTREACH STRATEGY / PLAN

- PTD utilizes poster boards at job locations indicating why work is being performed.
- PTD conducts presentations at Community Council meetings describing PSRP work.
- PTD crew leaders notify customers in person when planning access to facilities for transformer replacements.



ADWP BATES/EQUITY METRIC - Pole Replacement (Power)

RESPONSIBLE MANAGER: Mike Barkhuff, Power Transmission and Distribution

EQUITY CORE CATEGORY: Water and Power Infrastructure Investment

REPORTING PERIOD: October 2018

DEFINITION OF RATES METRIC: Number of Poles Replaced Against Plan **TARGET & ACCEPTABLE VARIANCE (FY 18/19):** Target = 3,500; Acceptable Variance = ± 15%

STATUS: Within Acceptable Variance

FYTD	Planned	Actual	Vari	iance	Re-Estimate	Pole Replacement
as of:	(No.)	(No.)	No.	%	1	FY 18/19 4500 +15%
Jul-18	292	529	237	81.2%		4000
Aug-18	584	803	219	37.5%	1	3500
Sep-18	876	1,009	133	15.2%		x 3000
Oct-18	1,168	1,309	141	12.1%		3000 <u>3</u> 2500 -159
Nov-18	1,460				1,460	2000
Dec-18	1,752				1,752	2° 1500
Jan-19	2,044	1	1		2,044	1000
Feb-19	2,336				2,336	500
Mar-19	2,628		-		2,628	
Apr-19	2,920				2,920	Jan Bray Bed Oct Bon Dec, Par 18 Har Bon May Jan 18
May-19	3,212				3,212	- Planned Actual
Jun-19	3,500				3,500	
and the second	Accepta	able Variance		± 15%	0.0%	Target and Acceptable Variance

SOURCE OF DATA: Jobs P6322 (KPI # 04.01.01.03)

1. BACKGROUND / PURPOSE

Replace 3,500 deteriorated poles due to age or other damage. Power Transmission and Distribution (PTD) maintains approximately 321,000 poles in its system. These poles have an average life span of fifty years. These poles support switches, light fixtures, transformers, and underground cables transitioning to an overhead termination, communication cables, crossarms and conductors at different voltage levels. Work is completed by Distribution Construction & Maintenance (DC&M) district and contract crews. This work is required to maintain compliance with California Public Utilities Commission (CPUC) General Order 165- Inspection Cycles for Electric Distribution Facilities, and our Power System Reliability Program (PSRP).

2. CRITERIA

• Poles for replacement were identified through the DC&M Inspection program.

3. ACHIEVEMENTS / MILESTONES MET

• To date, the target was to replace 1,168 poles and the current actual number of poles replaced was 1,309.

4. <u>PERFORMANCE / VARIANCE ANALYSIS</u> & YEAR END PROJECTION

• The actual number of poles replaced is within the 15% threshold target.

5. <u>MITIGATION PLAN AND / OR</u> <u>RECOMMENDATIONS</u>

• No mitigation plan is necessary at this time.

6. OUTREACH STRATEGY / PLAN

- PTD utilizes poster boards at job locations indicating why work was being performed.
- PTD conducts presentations at Community Council meetings describing PSRP work.
- PTD crew leaders notify customers in person when planning access to facilities for pole replacements.

LADWP RATES METRIC, - Crossarm Replacement (Power)

RESPONSIBLE MANAGER, Mike Barkhuff, Power Transmission and Distribution DEFINITION OF RATES METRIC: Number Of Crossarms Replaced Against Plan TARGET & ACCEPTABLE VARIANCE (FY 18/19): Target = 10,000; Acceptable Variance = ± 15%

REPORTING PERIOD: October 2018

FYTD	Planned	Actual	Vari	iance	Re-Estimate	Crossarm Replacement
as of:	(No.)	(No.)	No.	%		FY 18/19 +159
Jul-18	600	841	241	40.2%		11450
Aug-18	1,350	1,723	373	27.6%		9450
Sep-18	2,100	2,337	237	11.3%		<u>ا</u> <u>٤</u> 8450
Oct-18	3,000	2,983	-17	-0.6%		8450 7450 6450 6450
Nov-18	3,550				3,550	5 5450
Dec-18	5,000		1		5,000	<u>o</u> 4450
Jan-19	5,800				5,800	2 3450
Feb-19	6,630				6,630	1450
Mar-19	7,460			1.	7,460	
Apr-19	8,290				8,290	- July & 18 18 00, 10, 10, 10, 13, 18, 18, 18, 18, 18, 19, 19, 19
May-19	9,120				9,120	Planned Actual
Jun-19	10,000			1 - 1	10,000	Target and Acceptable Variance

SOURCE OF DATA: Jobs P6318 (KPI #04.01.01.21)

1. BACKGROUND / PURPOSE

Replace 10,000 deteriorated crossarms due to . age or other damage. Power Transmission and Distribution (PTD) maintains approximately 321,000 poles that usually support one or more crossarms. These crossarms support conductors at different voltage levels, transformers, switches, light fixtures, communication cables, etc. Work is done by Distribution Construction & Maintenance (DCM) district and contract crews. This work is required to maintain compliance with California Public Utilities Commission (CPUC) General Order 165- Inspection Cycles for Electric Distribution Facilities, and our Power System Reliability Program (PSRP).

2. ACHIEVEMENTS / MILESTONES MET

To date, the target was to replace 3,000 . crossarms and the current actual number of crossarms replaced is 2,983.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

The actual number of crossarms replaced is within the 15% threshold target.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

No mitigation plan at this time.

LADWP RATES/EQUITY METRIC - Cable Replacement (Power)

RESPONSIBLE MANAGER: Sager Farraj

REPORTING PERIOD: October 2018

Power Planning, Development, and Engineering Division EQUITY CORE CATEGORY: Water & Power Infrastructure Investment

DEFINITION OF RATES METRIC: No. of Miles of Cable Replaced Against Plan TARGET & ACCEPTABLE VARIANCE (FY 18/19): Target = 50 miles; Acceptable Variance = ±15%

STATUS: Outside Acceptable Variance

FYTD as of:	Planned	Actual	Varia	nce	Re-Estimate
	(Mile)	(Mile)	Mile	%	
Jul-18	4.2	3.2	-1.0	-23.8%	
Aug-18	8.4	6.4	-2.0	-23.8%	
Sep-18	12.6	8.9	-3.7	-29.4%	
Oct-18	16.8	13.1	-3.7	-22.0%	
Nov-18	21.0				21.0
Dec-18	25.0				25.0
Jan-19	29.2				29.2
Feb-19	33.4				33.4
Mar-19	37.6			$(\cdot - 1)$	37.6
Apr-19	41.8				41.8
May-19	46.0				46.0
Jun-19	50.0		1		50.0

SOURCE OF DATA: FI 21190, Job P6306 (KPI # 04.01.01.70)

1. NARRATIVE / BACKGROUND

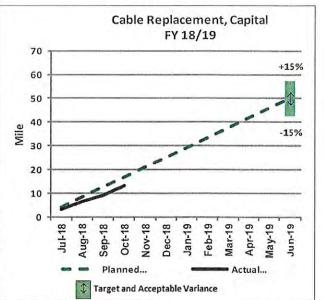
- Cable replacement of 4.8-kV and 34.5-kV cables for additional system reliability due to deterioration, overload, obsolescence and damage.
- 2. CRITERIA
 - Frequency of failures
 - Cable age
 - Physical deteriorations: cracks, bulging

3. ACHIEVEMENTS

 Through the month of October, Distribution Construction & Maintenance completed 13.1 circuit-miles. The key performance goal is 50 circuit-miles for fiscal year 18/19.

4. <u>PERFORMANCE/VARIANCE ANALYSIS & YEAR</u> END PROJECTION

• Variance through the month of October is 3.7 circuit-miles, 22% below target. This is due to Districts being behind with paper work. Cable replacement jobs haven't been closed even though the work is done. Districts crews have been focusing on cable replacement backlog.



Variance is 7,713.3K above budget; KPI number is expected to be higher once Districts close these jobs.

5. MITIGATION/RECOMMENDATION

Working with Districts to have the completed cable replacement jobs close.

6. OUTREACH STRATEGY / PLAN

- Neighborhood Council request for meeting on outages
- Available information on web site: <u>http://prp.ladwp.com</u>



24

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LADWP RATES METRIC – *Average Unit Cost per Transformer (Power)* **REPORTING PERIOD:** October 2018

RESPONSIBLE MANAGER: William Herriott, Power Transmission and Distribution

DEFINITION OF RATES METRIC: Average Unit Cost per Transformer TARGET & ACCEPTABLE VARIANCE (FY 18/19): Target = \$15.2K per transformer: Acceptable Variance = ± 15%

FYTD	Approved Budget /	Actual	Varia	Variance		
as of:	Planned	Autua	Unit or \$	%	(If Applicable	
Jul-18	15.2	7.6	(7.6)	-50.0%		
Aug-18	15.2	6.8	(8.4)	-55.3%		
Sep-18	15.2	4.7	(10.5)	-69.1%		
Oct-18	15.2	5.6	(9.6)	-63.2%		
Nov-18	15.2				9.0	
Dec-18	15.2				9.0	
Jan-19	15.2		1		9.0	
Feb-19	15.2				9.0	
Mar-19	15.2				9.0	
Apr-19	15.2				9.0	
May-19	15.2				9.0	
Jun-19	15.2				9.0	
	Accepta	ble Varianc	e ±	15%	-40.8%	

SOURCE OF DATA: Jobs P6394/P6309 (KPI # 04.01.01.71)

1. BACKGROUND / PURPOSE

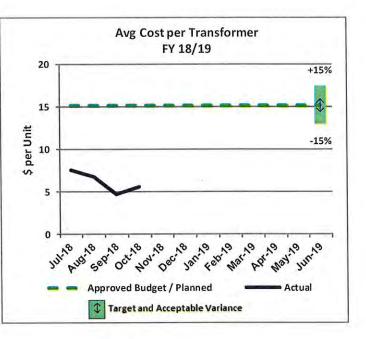
Identify and replace 800 distribution . transformers to increase reliability and maintain compliance with California Public Utilities Commission (CPUC) General Order 165-Inspection Cycles for Electric Distribution Facilities. Replace 50 transformers based on power quality concerns for a combined total of 850. Power Transmission and Distribution set target is re-estimated to \$9.0K per unit cost of average replacement.

2. ACHIEVEMENTS / MILESTONES MET

As of October 31, the target was to replace 283 transformers at 33% of the FY goal. Current replacement is 603 transformers which is 85% of our FY goal.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- PTD requested a correction on the approved cost per unit from 15.2K to 9K which was determined to be more realistic.
- If the approved amount was 9K would be closer to an acceptable variance yet still above the information being extracted from all reporting programs.



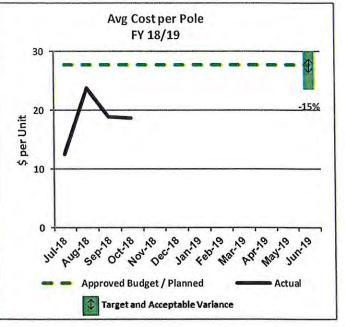
4. MITIGATION PLAN AND / OR RECOMMENDATIONS

- PTD has been working with Power New **Business Development and Technical** Application business group (PNBDTA) on a strategic goal to improve Work Management Information System (WMIS) mapping of Accelerated Code (AC) jobs. This appears aiding in the reduction of unit replacement costs on this metric and I expect that as we develop methods to isolate each KPI from jobs consisting of multiple KPI tracking items the cost will continue to decline.
- We will continue to work with PNBDTA on refining the mapping of AC jobs and providing the most accurate cost per unit on all metrics like this one.
- We will closely monitor and may re-estimate unit costs again in the third quarter of this program FY.

LADWP RATES METRIC - Average Unit Cost per Pole [Power] RESPONSIBLE MANAGERI, Multian Herrika, Doverting series of the period. **REPORTING PERIOD: October 2018**

DEFINITION OF RATES METRIC: Average Unit Cost per Pole TARGET & ACCEPTABLE VARIANCE (FY 18/19): Target = \$27.7K per pole: Acceptable Variance = ± 15%

FYTD	Approved Budget /	Actual	Varia	Variance		
as of:	Planned	Hotadi	Unit or \$	%	(If Applicable	
Jul-18	27.7	12.5	(15.2)	-54.9%		
Aug-18	27.7	23.8	(3.9)	-14.1%		
Sep-18	27.7	18.9	(8.8)	-31.8%		
Oct-18	27.7	18.7	(9.0)	-32.5%		
Nov-18	27.7				27.7	
Dec-18	27.7				27.7	
Jan-19	27.7				27.7	
-eb-19	27.7				27.7	
Mar-19	27.7				27.7	
Apr-19	27.7				27.7	
May-19	27.7	. C	· · · · · ·		27.7	
Jun-19	27.7				27.7	



26

SOURCE OF DATA: Jobs P6322 (KPI # 04.01.01.72)

1. BACKGROUND / PURPOSE

Replace 3,500 deteriorated power poles due to age or other damage. Power Transmission and Distribution (PTD) maintains approximately 321,000 poles in its system. Power poles have an average life span of fifty years. Power poles support switches, light fixtures, transformers, and underground cables transitioning to an overhead termination, communication cables, crossarms and conductors at different voltage levels. PTD has a target replacement cost of \$27.7K per unit.

2. ACHIEVEMENTS / MILESTONES MET

As of October 31, our current to date target was . a replacement of 1,168 power poles at 33% of the FY goal. PTD has completed replacement of 1,309 power poles which is 37% of the FY goal with an average cost of 18.7K per unit.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

PTD and Contract Operations personnel have exceeded estimated projections and this job is currently on track for meeting year end expectations for replacements. PTD managers are working with Power New Business **Development and Technical Application** business group (PNBDTA) to separate Work Management Information System Accelerated Codes for cross-arms and transformers from the pole jobs being completed in the field. This is the reason the cost per unit average is 33% below estimated unit cost on this Multi-Year Expenditure.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

- None at this time, some of the large pole replacement jobs are still being closed out even though the labor, material, fleet and other costs were already accounted for during earlier months.
- PTD will continue to monitor and audit unit costs as we work with PNBDTA to refine accounting for these jobs.
- PTD will probably recommend a re-adjustment of per unit cost in the 3rd quarter.

DWP RATES METRIC *– Average Unit Cost per Crossarm (Poweri* **REPORTING PERIOD:** October 2018

3

\$ per Unit

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RESPONSIBLE MANAGER: William Herript, Power Transmission and Distribution

DEFINITION OF RATES METRIC: Average Unit Cost per Crossarms TARGET & ACCEPTABLE VARIANCE (FY 18/19): Target = \$2.5K per crossarm: Acceptable Variance = ± 15%

FYTD	Approved Budget /	Actual	Varia	Re-Estimate	
as of:	Planned		Unit or \$	%	(If Applicable)
Jul-18	2.5	1.7	(0.8)	-32.0%	
Aug-18	2.5	2.1	(0.4)	-16.0%	
Sep-18	2.5	1.6	(0.9)	-36.0%	
Oct-18	2.5	1.7	(0.8)	-32.0%	
Nov-18	2.5				2.5
Dec-18	2.5				2.5
Jan-19	2.5				2.5
Feb-19	2.5				2.5
Mar-19	2.5				2.5
Apr-19	2.5				2.5
May-19	2.5				2.5
Jun-19	2.5				2.5



1. BACKGROUND / PURPOSE

Replace 10,000 deteriorated crossarms due to age or other damage. Power Transmission and Distribution (PTD) maintains approximately 321,000 poles that usually support one or more crossarms. These crossarms support conductors at different voltage levels, transformers, switches, light fixtures, communication cables, etc. PTD has a target replacement cost \$2.5K per unit.

2. ACHIEVEMENTS / MILESTONES MET

To date, the target was to replace 3,000 crossarms which is 30% of FY goal. Actual replacements total 2,983 crossarms which is 30% of the FY goal.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

Target and Acceptable Variance

404.18

Approved Budget / Planned

Janas Decite

Avg Cost per Crossarm FY 18/19

PTD is currently exceeding target expectations at \$2.5K per unit which is -32% below target. Some of these were multiple arms replaced on the same facility which lowered the cost per unit. As more jobs are completed with single arm replacements or restricted access facilities the cost may illustrate an increase and balance out.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

- PTD will continue to monitor and is working with Power New Business Development and Technical Application business group on the Work Management Information System (WMIS) mapping of work requests targeting this job
- PTD may re-estimate unit costs again in the 3rd quarter as we have done in the past if we continue to average nearly 30% under approved per unit cost.

+15%

1

-15%

Actual

LADWP RATES METRIC – Average Unit Cost per Mile of Cable (Power) **REPORTING PERIOD:** October 2018

RESPONSIBLE MANAGER: William Herriott, Power Transmission and Distribution

DEFINITION OF RATES METRIC: Average unit cost per mile of cable replaced TARGET & ACCEPTABLE VARIANCE (FY 18/19): Target = \$849.4 per mile of cable replaced; : Acceptable Variance = ± 15%

Outside Acceptable Variance STATUS:

FYTD	Approved Budget /	Actual	Varia	Variance		
as of:	Planned		Unit or \$		(If Applicable)	
Jul-18	849.4	1045.5	196.1	23.1%	_	
Aug-18	849.4	1274.3	424.9	50.0%		
Sep-18	849.4	792.9	(56.5)	-6.7%		
Oct-18	849.4	1143.1	293.7	34.6%		
Nov-18	849.4				849.4	
Dec-18	849.4				849.4	
Jan-19	849.4				849.4	
Feb-19	849.4	· · · · · · · · · ·			849.4	
Mar-19	849.4				849.4	
Apr-19	849.4				849.4	
May-19	849.4				849.4	
Jun-19	849.4				849.4	
	Accepta	ble Varianc	e ±	15%	0.0%	

SOURCE OF DATA: Jobs P6306 (KPI # 04.01.01.74)

BACKGROUND / PURPOSE

Replace 50 miles of 4.8KV and 34.5KV underground (4.8-kV and 34.5-kV) distribution cables that require periodic upgrading because of load growth, failures due to storm damage, accidents, inherent defects, deterioration, age or advancements in materials and in power distribution techniques. Power Transmission and Distribution (PTD) has a target replacement cost of \$849.4K per mile.

2. ACHIEVEMENTS / MILESTONES MET

The current month's target was a year to date replacement of 16.8 miles of cable. The actual cable replacement accounted for totals 13.1 miles.

Avg Cost per Mile of Cable FY 18/19 1500 +15% 1000 \$ per Unit ¢ -15% 500 O AU918 500,18 octine 404.18 teb.19 Jun Approved Budget / Planned Actual Target and Acceptable Variance

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- The current information regarding average cost per mile of cable indicates 22% over on the planned cost per mile.
- We should be at 37% of our FY cable replacement goal and are currently lagging at 26%.
- Since actual cable replacement mileage is only accounted for upon the completion of task 145 in WMIS while labor is accounted for daily and materials are accounted for through Supply Chain entries after the completion of Requests Material Services (RMS), the variances may fluctuate greatly with total cost taking several weeks or months to come in line.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

- PTD will closely monitor job performance and ensure that time materials and labor are being accounted for accurately and appropriately.
- PTD will continue to work with Power New **Business Development and Technical** Application business group to develop a mechanism to align labor, materials, fleet charges, units, etc.

Water System

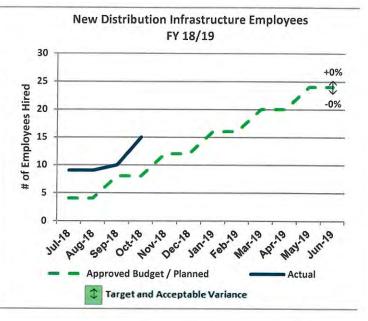
LADWP RATES METRIC – NEW DISTRIBUTION INFRASTRUCT

RESPONSIBLE MANAGER: Breonia Lindsey/Sandra Foster

REPORTING PERIOD: October 2018

DEFINITION OF RATES METRIC: Number of employees for new crews dedicated to distribution infrastructure as compared to plan. TARGET & ACCEPTABLE VARIANCE (FY 18/19): 24 employees, 15%

STATUS:	Exc				
FYTD	Approved Budget /			ance	Re-Estimate
as of:	Planned		# Emp	%	(If Applicable)
Jul-18	4	9	5	125.0%	
Aug-18	4	9	5	125.0%	
Sep-18	8	10	2	25.0%	
Oct-18	8	15	7	87.5%	
Nov-18	12				
Dec-18	12				
Jan-19	16			1.1.1	
Feb-19	16				
Mar-19	20				
Apr-19	20			6	· · · · · · · · · · · · · · · · · · ·
May-19	24				
Jun-19	24				



SOURCE OF DATA: Hiring Plan/Annual Personnel Resolution

1. BACKGROUND / PURPOSE

 Distribution infrastructure crews are necessary to meet mainline replacement and other infrastructure goals.

*The target is three crews totaling 24 employees.

3. <u>PERFORMANCE / VARIANCE ANALYSIS</u> <u>& YEAR END PROJECTION</u>

 The Division has been aggressively filling vacant mainline positions. At this rate, the Division will exceed its fiscal year goal of hiring 24 new employees for distribution infrastructure crews.

2. ACHIEVEMENTS/MILESTONES MET

 As of October 2018, the Division hired 15 mainline positions, exceeding its goal.

4. <u>MITIGATION PLAN AND/OR</u> <u>RECOMMENDATIONS</u>

 The division is continually pushing hard to fill vacant mainline positions from the previous and current fiscal years in order to meet its mainline replacement goal.

Exceeds Target

LADWP RATES METRIC – WATER SUPPLY COST BUDGET VS ACTUAL-CAPITAL (Water)

 RESPONSIBLE MANAGER: Dora Maese
 Annual for DAM
 REPORTING PERIOD: October 2018

 DEFINITION OF RATES METRIC: Board approved annual budget vs actual expenditures.
 TARGET & ACCEPTABLE VARIANCE (FY 18/19): \$143,035K , 10 percent

STATUS: Outside Acceptable Variance

FYTD	Approved Budget /	Actual	Varia	ance	Re-Estimate	Water Supply Cost - Capital
as of:	Planned		Unit or \$	%	(If Applicable)	FY 18/19
Jul-18	4,752	4,751	-1	0.0%		+1 160000
Aug-18	10,712	10,711	-1	0.0%		140000
Sep-18	16,562	16,562	0	0.0%		120000
Oct-18	25,983	21,885	-4,098	-15.8%	1	8 10000
Nov-18	34,493					F 80000
Dec-18	43,244					··· 60000
Jan-19	53,406		1			40000
Feb-19	63,172		1			20000
Mar-19	72,945					
Apr-19	89,321		·	1.1.1.1		741 200 300 100 100 100 100 100 100 100 100 1
May-19	105,609					2. br. de. O. 40 De 20. 60. 40. br. 410, 22
Jun-19	143,035		1			- Approved Budget / Planned - Actual
- And all of the	Acceptable	e Variance	±	10%		Target and Acceptable Variance

SOURCE OF DATA: FIs 22130, 22140, 22150, 23150, 24315, 24318, and 28204.

1. BACKGROUND / PURPOSE

 Water supply costs include both current supply of water to our customers and development of future supplies necessary to make more resilient and reliable source of water.

2. ACHIEVEMENTS / MILESTONES MET

- Completed construction of Machado Lake Phase 1 in October 2018.
- Executed an MOU with Forest Lawn on October 11, 2018 to partner in the design of 3 million gallon tank.
- A 30-year Service Agreement with Water Replenishment District to increase delivery of recycled water to the Dominguez Gap Barrier is going to the Board for consideration on November 27, 2018.

3. <u>PERFORMANCE / VARIANCE ANALYSIS</u> <u>& YEAR END PROJECTION</u>

 The demand for residential and commercial Water Conservation rebates has decreased.

4. <u>MITIGATION PLAN AND / OR</u> <u>RECOMMENDATIONS</u>

Continue on going work as planned

LADWP RATES METRIC – WATER SUPPLY COSTS BUDGET VS ACTUAL-0&M

(Water)

REPORTING PERIOD: October 2018

DEFINITION OF RATES METRIC: Board approved annual budget vs actual expenditures. TARGET & ACCEPTABLE VARIANCE (FY 18/19): \$116,711K, 10 percent

STATUS: Within Acceptable Variance

RESPONSIBLE MANAGER: Dora Maese

FYTD	Approved Budget /	Actual	Varia	ince	Re-Estimate	Water Supply Cost - O&M
as of:	Planned		Unit or \$	%	(If Applicable)	FY 18/19
Jul-18	6,557	6,563	6	0.1%		
Aug-18	16,464	15,349	-1,115	-6.8%		120000
Sep-18	27,682	27,062	-620	-2.2%		100000 -10
Oct-18	37,205	34,835	-2,370	-6.4%		80000 1 = 60000
Nov-18	46,820					E 60000
Dec-18	56,694		=	-		
Jan-19	67,067					40 000
Feb-19	77,403					20000
Mar-19	87,629			11.2		0 +
Apr-19	97,328					111, 200, 300, 00, 10, 00, 10, 10, 10, 10, 10, 10,
May-19	106,998					
Jun-19	116,711					- Approved Budget / Planned - Actual
	Acceptable	e Variance	±	10%		Target and Acceptable Variance

SOURCE OF DATA: FIs 3022001, 3022005, 3022015, 3022025, 3022035, 3022037, 3051000, 3052000, 3112009, 3112200, 3122240, 3222507, 4013005, 4053010, and 4092023.

1. BACKGROUND / PURPOSE

 Water supply costs include both current supply of water (excluding Purchased Water cost) to our customers and development of future supplies necessary to make more resilient and reliable source of water.

2. ACHIEVEMENTS / MILESTONES MET

 The City met the Mayor's Executive Direct No. 5 conservation goals of reducing dependency on imported water supply in the spring of 2016 and sustained at or below the 106 GPCD target through August 2017.

3. <u>PERFORMANCE / VARIANCE ANALYSIS</u> <u>& YEAR END PROJECTION</u>

On target.

4. <u>MITIGATION PLAN AND / OR</u> <u>RECOMMENDATIONS</u>

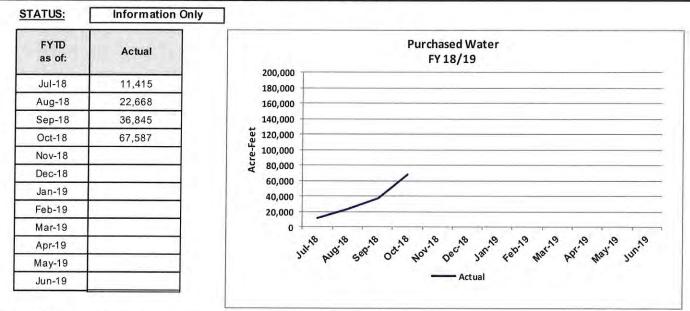
• Continue to monitor the water supply expenditure carefully to ensure it is in line with the approved budget.

32

LADWP RATES METRIC – Purchased Water (Water) RESPONSIBLE MANAGER: Dora Maese MA R. Ma Dr

REPORTING PERIOD: October 2018

DEFINITION OF RATES METRIC: Annual quantity of purchased water in acre-feet (AF). Information only. TARGET & ACCEPTABLE VARIANCE (FY 18/19): N/A - for information only



SOURCE OF DATA: Monthly Metropolitan Water District invoices.

1. BACKGROUND / PURPOSE

- Purchased water from Metropolitan Water . District is an important source of water for our overall water supply portfolio and makes it more resilient.
- The Mayor's long term plan is to reduce dependency on purchased water supply.

2. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- During normal weather conditions annual amount of purchased water is 150,808 AF.
- During the summer months, the Water System maximized water deliveries from the Los Angeles Aqueduct (LAA). This reduced the amount of purchased water in the beginning of the fiscal year.

3. MITIGATION PLAN AND / OR RECOMMENDATIONS

- As of April 1st, 2018 the overall weighted average for the Owens River Basin snowpack was at 66% of normal.
- 20% conservation has reduced the overall water use, minimizing purchased water.
- San Fernando Basin groundwater production has been increased to mitigate total purchased water numbers.

LADWP RATES METRIC – RECYCLED WATER DELIVERED (Water

RESPONSIBLE MANAGER: William T. Van Wagoner

REPORTING PERIOD: October 2018

DEFINITION OF RATES METRIC: Annual quantity of recycled water delivered in acre-feet (AF) against plan. TARGET & ACCEPTABLE VARIANCE (Fiscal Year FY 18/19): 12,000 AF, 10%

STATUS: Within Acceptable Variance

FYTD	Approved Budget /	Actual	Vari	iance	Re-Estimate	
as of:	Planned		AF	AF % (If Appli		
Jul-18	1,000	1,066	66	6.6%		
Aug-18	2,000	2,206	206	10.3%		
Sep-18	3,000	2,970	-30	-1.0%		
Oct-18	4,000	3,688	-312	-7.8%		
Nov-18	5,000					
Dec-18	6,000					
Jan-19	7,000				1.1	
Feb-19	8,000					
Mar-19	9,000					
Apr-19	10,000					
May-19	11,000					
Jun-19	12,000		0		- Control of Control o	

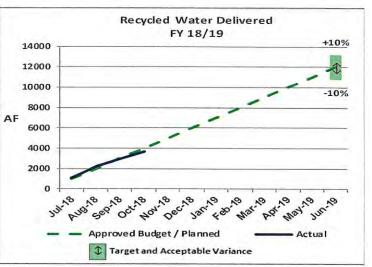
SOURCE OF DATA: Customer Recycled Water Meter Reads

1. BACKGROUND / PURPOSE

 Recycled water is one of the local supply strategies to meet the Mayor's Sustainable City pLAn to reduce dependency on imported water.

2. ACHIEVEMENTS / MILESTONES MET

- Delivered 3,688 acre-feet (AF) of recycled water for FY 18/19 that is approximately 8 percent below the planned goal.
- In July 2018, Playa Vista Cleo and Playa Vista Mason Parkway Irrigation recycled water service was turned on. These sites will use 4 AF of recycled water per year for irrigation.
- In July 2018, Playa Vista Street Parkway Irrigation Parcel 6 (Connection 12) recycled water service was turned on. This site will use 2 AF of recycled water per year for irrigation.
- In July 2018, Playa Vista Street Parkway Irrigation Parcel 6 (Connection 5) recycled water service was turned on. This site will use 2 AF of recycled water per year for irrigation.
- In August 2018, Playa Vista Hayden Housing Development recycled water service was turned on. This site will use 5 AF of recycled water per year for irrigation.



3. <u>PERFORMANCE / VARIANCE ANALYSIS</u> & YEAR END PROJECTION

- Terminal Island Water Reclamation Plant owned by Los Angeles Department of Sanitation continues to experience fluctuations in flow in 2018 due to testing, maintenance, and electrical issues.
- Major customer (Dominguez Gap Seawater Intrusion Barrier) has been unable to take water much of the year due to infrastructure failures.

4. <u>MITIGATION PLAN AND / OR</u> <u>RECOMMENDATIONS</u>

 Continue to connect new recycled water customers where recycled water is available and can be supplied at a reasonable cost.

LADWP RATES METRIC – STORMWATER CAPACITY (Water)

RESPONSIBLE MANAGER: David Pettijohn

REPORTING PERIOD: October 2018

DEFINITION OF RATES METRIC: Stormwater system capacity milestones in acre-feet (AF) against plan. TARGET & ACCEPTABLE VARIANCE (FY 18/19): 72,000 AFY; 10% variance

STATUS: Within Acceptable Variance

FYTD	Approved Budget /	Actual	Varia	ance	Re-Estimate	Stormwater Capacity
as of:	Planned		Unit or \$	%	(If Applicable)	FY 18/19 85,000
Jul-18	67,417	65,321	-2,096	-3.1%	1	+109
Aug-18	67,834	65,321	-2,513	-3.7%		80,000
Sep-18	68,251	65,321	-2,930	-4.3%		75,000
Oct-18	68,668	65,321	-3,347	-4.9%		
Nov-18	69,085			_		4
Dec-18	69,502				· · · · · · · · · · · · · · · · · · ·	-10%
Jan-19	69,919					60,000
Feb-19	70,336					55,000
Mar-19	70,753					50,000
Apr-19	71,170				1	211 Pro 286 10 1401, Dec, 281, 480, 181, 481, 181, 181, 181, 181, 181, 181
May-19	71,587				1	2. br. B. O. 4. De 20. to 40. br. 40. 22
Jun-19	72,000			1		- Approved Budget / Planned - Actual
	Acceptabl	e Variance	±	10%		Target and Acceptable Variance

SOURCE OF DATA: Summary of Major Stormwater Capture Projects Report

1. BACKGROUND / PURPOSE

- Projects to meet the Mayor's Sustainability pLAn, 2015 Urban Water Management Plan and LADWP's Stormwater Capture Master Plan.
- Replenishment of the San Fernando Groundwater Basin is vital to sustain the long-term native safe yield of the City's local groundwater supply.

2. ACHIEVEMENTS / MILESTONES MET

- Water system has several projects in design/construction. These projects include:
 - Tujunga Spreading Grounds (8,000) AFY) is 56% complete
 - Van Nuys Boulevard Great Street (95 AFY) Installation of drywells has been completed. Permeable pavement and swale construction is in progress.
 - o Lankershim Boulevard Great Street (51 AFY) 100% construction documents have been completed.

- San Fernando Regional Park 0 Stormwater Capture Project (200 AFY) design/planning is in progress.
- Victory Goodland Median Stormwater Capture Project (97 AFY) pre-design/planning is in progress.
- Silver Lake Reservoir Stormwater 0 Capture Project (159 AFY) MOA was approved by the Board of Water and Power; pre-design/planning is in progress.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- On target.
- 4. MITIGATION PLAN AND / OR RECOMMENDATIONS
 - Continue on going work as planned.

34

Exceeds Target

LADWP RATES METRIC – ANNUAL GROUNDWATER PRODUCTION CENTRAL BASIN (Water)

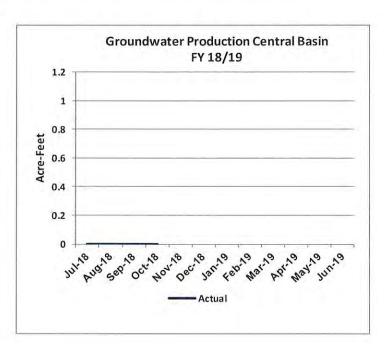
RESPONSIBLE MANAGER: Steven R. Cole JK

REPORTING PERIOD: October 2018

35

DEFINITION OF RATES METRIC: Annual groundwater production in the Central Basin in acre-feet (AF) against the plan. Information only **TARGET & ACCEPTABLE VARIANCE (FY18/19):** N/A for information only.

STATUS:	Information Only
FYTD as of:	Actual
Jul-18	0
Aug-18	0
Sep-18	0
Oct-18	0
Nov-18	
Dec-18	
Jan-19	
Feb-19	
Mar-19	
Apr-19	
May-19	
Jun-19	



SOURCE OF DATA: Well Metered Reads

1. BACKGROUND / PURPOSE

- City of Los Angeles water rights in Central Basin is 16,546 AF/Y.
- Pumping goal is set at 9,668 AF (58% of water rights), due to limited groundwater pumping and distribution capacity.
- Pumping Central Basin groundwater can reduce purchases of imported water at a cost less than \$400 per AF, saving nearly \$600 per AF as compared with Tier 1 treated water purchased from MWD.

2. <u>PERFORMANCE / VARIANCE ANALYSIS</u> <u>& YEAR END PROJECTION</u>

- Manhattan Well Field was turned off on February 27, 2017 to maximize the usage of Aqueduct water. This well field remains off due to construction activities at the well site.
- The 99th St Well Field was turned off on May 16, 2016 due to water quality issues related to elevated levels of naturally occurring iron and manganese in the Watts and Green Meadows areas. The discoloration issue has been closed. However, the wells will remain off line until the new chloramination station and new

iron/manganese filtration removal systems are constructed.

3. <u>MITIGATION PLAN AND / OR</u> <u>RECOMMENDATIONS</u>

 The project to construct iron/manganese filtration removal systems for the 99th St Well Field is currently in the design phase. The anticipated in-service date is mid-2020.

Within Acceptable Variance

LADWP RATES METRIC – ANNUAL GROUNDWATER PRODUCTION SAN FERNANDO (Water)

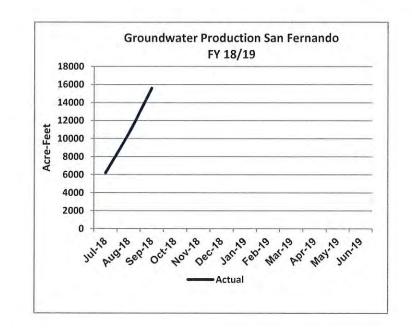
RESPONSIBLE MANAGER: Steven R. Cole 100

REPORTING PERIOD: October 2018

36

DEFINITION OF RATES METRIC: Annual groundwater production in the San Fernando in acre-feet (AF) against the plan. Information only. **TARGET & ACCEPTABLE VARIANCE (FY 18/19):** N/A for information only.

STATUS:	Informatio	n Only
FYTD as of:	Actual	
Jul-18	6,166	
Aug-18	10,529	
Sep-18	15,597	
Oct-18	N/A	
Nov-18		
Dec-18		
Jan-19		
Feb-19		
Mar-19		
Apr-19		
May-19		
Jun-19		



SOURCE OF DATA: Well Metered Reads

1. BACKGROUND / PURPOSE

- City of Los Angeles water rights in San Fernando Basin is 87,000 AF
- Pumping goal is set at 65,132 AF is based on groundwater quality and its depth.

2. <u>PERFORMANCE / VARIANCE ANALYSIS</u> & YEAR END PROJECTION

On target

3. <u>MITIGATION PLAN AND / OR</u> <u>RECOMMENDATIONS</u>

 Continue to use San Fernando Basin groundwater production as appropriate to reduce dependency on purchased water supply.

LADWP RATES METRIC – LA AQUEDUCT BUDGET VS ACTUAL - CAPITAL (Water)

REPORTING PERIOD: October 2018

LA Aqueduct Budget vs Actual - Capital FY 18/19

Dec Jan ep

+10%

-10%

Actual

RESPONSIBLE MANAGER: Daniel Raftevold

DEFINITION OF RATES METRIC: Board approved annual budget vs actual expenditures. **TARGET & ACCEPTABLE VARIANCE (FY 18/19):** \$35,501K, 10 percent

STATUS: Within Acceptable Variance

FYTD	Approved Budget /	Actual	Vari	ance	Re-Estimate	
as of:	Planned	Actual	\$	%	(If Applicable)	
Jul-18	1,345	1,345	0	0.0%		
Aug-18	3,810	3,810	0	0.0%		
Sep-18	5,633	5,633	0	0.0%		s
Oct-18	7,716	7,517	-199	-2.6%		in 1,000s
Nov-18	9,800				9800	n 1,
Dec-18	11,883				11883	\$
Jan-19	13,996				13996	
Feb-19	16,049				16049	
Mar-19	18,132				18132	
Apr-19	20,215				20215	
May-19	22,298				22298	
Jun-19	35,501				23004	

SOURCE OF DATA: Fls 22130, 22140, and 22150.

1. BACKGROUND / PURPOSE

• The Los Angeles Aqueduct is an important source of non-purchased water. During times of low flow in the Aqueduct, infrastructure projects are completed (this cannot be done during high flow periods).

2. ACHIEVEMENTS / MILESTONES MET

 A significant amount of work has been completed on the South Haiwee Tower and Sag Pipe re-coating projects year-to-date.

3. <u>PERFORMANCE / VARIANCE ANALYSIS</u> <u>& YEAR END PROJECTION</u>

Approved Budget / Planned

 Delays in the Grant Lake Spillway Project due to environmental documentation are expected to leave this item below budget by approximately \$12.5M at fiscal year-end.

Target and Acceptable Variance

4. <u>MITIGATION PLAN AND / OR</u> <u>RECOMMENDATIONS</u>

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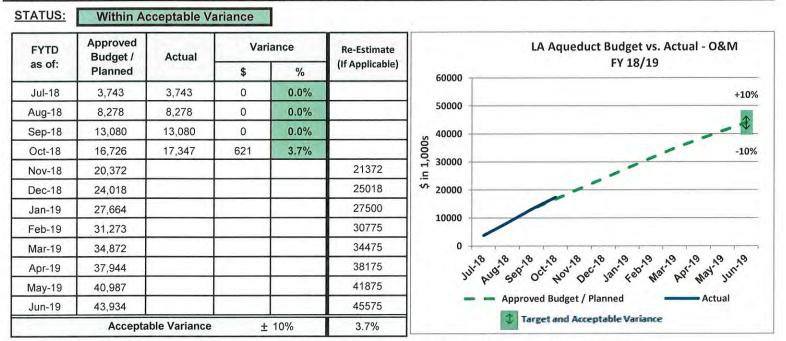
 Crews are expected to complete approximately three miles of Old Top Removal on the buried concrete conduit section of the first LA Aqueduct later in the fiscal year.

LADWP RATES METRIC – LA AQUEDUCT BUDGET VS ACTUAL – 0&M (Water)

RESPONSIBLE MANAGER: Daniel Raftevold

REPORTING PERIOD: October 2018

DEFINITION OF RATES METRIC: Board approved annual budget vs actual expenditures. TARGET & ACCEPTABLE VARIANCE (FY 18/19): \$43,934K, 10 percent



SOURCE OF DATA: FIs 3022001, 3022005, 3022015, 3022025, 3022035, 3112009, 3222507, 4013005, and 4092023.

1. BACKGROUND / PURPOSE

 The Los Angeles Aqueduct is an important source of non-purchased water. During times of low flow in the Aqueduct (as per the first four months of the year), preventative maintenance is completed (this cannot be done during high flow periods).

2. ACHIEVEMENTS / MILESTONES MET

 Significant facility maintenance in the Southern District, and substantial maintenance on dams in the Northern District has been completed year-todate.

3. <u>PERFORMANCE / VARIANCE ANALYSIS</u> <u>& YEAR END PROJECTION</u>

 Although more capital work will be completed later in the year, Aqueduct operations and maintenance is still expected to be above budgeted levels by approximately \$1.6M at fiscal yearend due to the facility maintenance in Southern District and maintenance on dams in the Northern District.

4. <u>MITIGATION PLAN AND / OR</u> <u>RECOMMENDATIONS</u>

 The aforementioned maintenance on dams (particularly at Long Valley Dam), is in preparation for a Dept. of Safety of Dams (DSOD) mandated inspection.

LADWP RATES METRIC - GALLONS PER CAPITA PER DAY (GPCD)(Water) RESPONSIBLE MANAGER: Penny Falcon 7. M Curty for P. Falcon

REPORTING PERIOD: October 2018

DEFINITION OF RATES METRIC: Level of water conservation against target GPCD. TARGET & ACCEPTABLE VARIANCE (FY 18/19): 106 GPCD & 10% Acceptable Variance

STATUS: Within Acceptable Variance

FYTD	Approved Budget /	Actual	Varia	ance	Re-Estimate of	GPCD
as of:	Planned		GPCD	%	Budget/Planned	FY 18/19 +10%
Jul-18	106	112	6	5.7%	106	
Aug-18	106	112	6	5.7%	106	114
Sep-18	106	112	6	5.7%	106	n 112
Oct-18	106	112	6	5.7%	106	
Nov-18	106				106	
Dec-18	106				106	6 106
Jan-19	106				106	102
Feb-19	106				106	100
Mar-19	106			1	106	98
Apr-19	106				106	July 200, 380, 00, 180, 080, 180, 480, 180, 201, 189, 301, 9
May-19	106				106	
Jun-19	106				106	- Approved Budget / Planned Actual
	Acceptab	le Variance	±	10%	0.0%	Target and Acceptable Variance

SOURCE OF DATA: Water Operations Monthly Supply Tracking

1. BACKGROUND / PURPOSE

Gallons per capita per day (GPCD) is a measure of the City's progress in water conservation. The Mayor's Sustainable City pLAn set GPCD reduction goals of 20, 22.5, and 25 percent by 2017, 2025 and 2035, respectively.

2. ACHIEVEMENTS / MILESTONES MET

On January 1, 2017, LADWP met the pLAn goal of 20 percent reduction in GPCD and sustained this milestone at or below 106 GPCD through August 2017.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

Customer water use has decreased with the cooler autumn weather, but the 12-month rolling average GPCD has remained steady at 112 for the past 6 months.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

LADWP will continue to support customer water use efficiency practices through its rebate programs, conservation messaging, educational programs, and other innovative solutions. These efforts will continue to help the City achieve its long-term water use reduction goals identified in the Sustainable City pLAn.

LADWP RATES METRIC – FIXED ASSETS REPLACEMENT BUDGET VS ACTUAL

(Water)

REPORTING PERIOD: October 2018

DEFINITION OF RATES METRIC: Board approved annual budget vs actual expenditures. TARGET & ACCEPTABLE VARIANCE (FY 18/19): \$294,530K, 10 percent

STATUS: Within Acceptable Variance

RESPONSIBLE MANAGER: Dora Maese

FYTD	Approved Budget /	Actual	Vari	ance	Re-Estimate	Fixed Assets Replacement Budget
as of:	Planned		\$	%	(If Applicable)	FY 18/19 350000 ++10
Jul-18	16,768	16,769	1	0.0%		
Aug-18	36,486	36,487	1	0.0%		300000
Sep-18	53,707	53,706	-1	0.0%		250000 -10
Oct-18	76,788	74,652	-2,136	-2.8%		§200000
Nov-18	99,607				Page 100	F .≘ 150000
Dec-18	121,277					\$\$ I
Jan-19	143,180					100000
Feb-19	164,850		ļ — — I			50 000
Mar-19	187,267					0 +
Apr-19	211,390					241, 849, 360, 18, 18, 18, 18, 18, 18, 18, 18, 18, 18
May-19	235,513				· · · · · · · · · · · · · · · · · · ·	
Jun-19	294,530					Approved Budget / Planned - Actual
	Acceptable	e Variance	±	10%		Target and Acceptable Variance

SOURCE OF DATA: FIs 23220, 23290, 24150, 26220, 26331, 27210, 29140, and 29328.

1. BACKGROUND / PURPOSE

 This metric tracks the Water System's overall infrastructure replacement program.
 Expenditures include mainline replacement, trunkline replacement, pump stations, regulator stations, tanks and other key Water System facilities.

2. ACHIEVEMENTS / MILESTONES MET

- As of October 2018, installed 57,872 feet of mainline.
- As of October 31, 2018, installed 83.3% or 4,595 feet of the open trench portion of the 54-inch diameter steel pipe, Foothill TL Unit 3 Phase I and installed 23.1% or 1,750 feet of open trench portion of 54-inch diameter earthquake resistant pipe Foothill TL Unit 3 Phase II.

3. <u>PERFORMANCE / VARIANCE ANALYSIS</u> <u>& YEAR END PROJECTION</u>

• On target.

4. <u>MITIGATION PLAN AND / OR</u> <u>RECOMMENDATIONS</u>

 Continue hiring staff to accomplish the Water Infrastructure Plan goals.

LADWP RATES METRIC - PUMP STATIONS BUDGET VS ACTUAL (Water)

RESPONSIBLE MANAGER: Susan Rowghani Sum MMM REPORTING PERIOD: October 2018

DEFINITION OF RATES METRIC: Board approved annual budget vs actual expenditures. TARGET & ACCEPTABLE VARIANCE (FY 18/19): \$14,440K, 10 percent

FYTD	Approved Budget /	Actual	Var	iance	Re-Estimate		Pump Stations Budget
as of:	Planned		\$	%	(If Applicable)	18000	FY 18/19
Jul-18	541	541	0	0.0%		16000 -	+109
Aug-18	1,038	1,038	0	0.0%		14000	£
Sep-18	1,400	1,400	0	0.0%		v 12000 -	/*
Oct-18	2,241	1,956	-285	-12.7%		8 10000 -	-10%
Nov-18	3,358					10000 - 1000000 - 100000 - 100000 - 100000 - 100000 - 100000 - 100000 - 100000 - 100000 - 100000 - 100000 - 100000 - 1000000 - 100000 - 100000 - 100000 - 1000000 - 10000000 - 100000000	, ,
Dec-18	4,474					··· 6000	
Jan-19	5,713					4000 -	
Feb-19	6,829					2000 -	
Mar-19	8,639					0 +	
Apr-19	10,635					Julia	8 4 4 8 8 4 8 4 8 4 8 4 9 4 9 8 4 8 4 8
May-19	12,631					20	
Jun-19	14,440					-	- Approved Budget / Planned - Actual

SOURCE OF DATA: FI 23220, Pump Stations

1. BACKGROUND / PURPOSE

- The Pump Station Functional Item includes projects for the replacement of individual pumps and motors in the pump stations, and also the upgrading of the entire system of pumping facilities.
- Goals for pump and motor replacement for this fiscal year are to replace twelve pumps and/or motors.

2. ACHIEVEMENTS / MILESTONES MET

- Through October 2018, five pumps and/or motors have been replaced.
- Victory Pump Station Project has completed the Planning Phase and started the Design Phase.
- Planning started on the Garvanza Pump Station hydraulic analysis.

3. <u>PERFORMANCE / VARIANCE ANALYSIS</u> <u>& YEAR-END PROJECTION</u>

 Design for the Redmont Pump Station is expected to be completed by December 2018. Construction has been tentatively scheduled to start in February 2020. 41

 Penstock and Van Norman Pump Stations Project is expected to be done by December 2018.

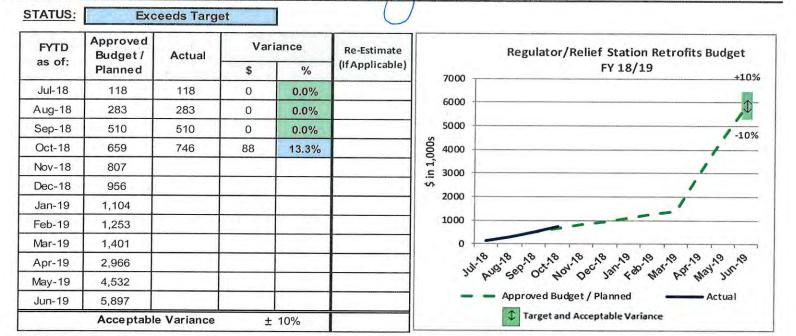
4. <u>MITIGATION PLAN AND / OR</u> <u>RECOMMENDATIONS</u>

 Planning Group to confirm with Water Operations if there is a need for Garvanza Pump Station to remain in service for emergency backup before ramping up work.

LADWP RATES METRIC – REGULATOR/RELIEF STATION RETROFITS BUDGET VS ACTUAL (Water)

RESPONSIBLE MANAGER: Susan Rowghani Subau Muth REPORTING PERIOD: October 2018

DEFINITION OF RATES METRIC: Board approved annual budget vs actual expenditures. TARGET & ACCEPTABLE VARIANCE (FY 18/19): \$5,897K, 10 percent



SOURCE OF DATA: FI 24150

1. BACKGROUND / PURPOSE

- Regulator/Relief Stations are necessary to maintain reliable supply and pressure through much of the water distribution system.
- Regulator Station Retrofit goals for this fiscal year are to replace or rehabilitate four Pressure Regulating Stations.

2. ACHIEVEMENTS / MILESTONES MET

 Through October 2018, one regulator station has been replaced/rehabilitated out of the planned four for the fiscal year.

3. <u>PERFORMANCE / VARIANCE ANALYSIS</u> <u>& YEAR-END PROJECTION</u>

- Final Planning on Horner Holt Regulator Station project has been put on hold. The project will be reassessed in the future.
- Construction on Lucile & Inglewood Regulator Station is scheduled for April 2019 since the Trunk Line Design-Build contract will not include mainline work as originally anticipated. Western District crews will first do mainline priority work before starting on the regulator station.

4. <u>MITIGATION PLAN AND / OR</u> <u>RECOMMENDATIONS</u>

Exceeds target.

LADWP RATES METRIC - MAINLINE REPLACEMENT (Water)

RESPONSIBLE MANAGER: Breonia Lindsey/Sandra Foster

DEFINITION OF RATES METRIC: Feet of mainline replaced against plan. TARGET & ACCEPTABLE VARIANCE (FY 18/19): 232,000 feet, 10%

STATUS: **Needs Attention** Approved FYTD Variance **Mainline Replacement Re-Estimate** Budget / Actual as of: (If Applicable) FY 18/19 Planned Feet % 300000 +10% Jul-18 14,888 13,740 -1148 -7.7% 250000 Aug-18 29,888 28,189 -1699 -5.7% 1 -4327 Sep-18 45,150 40,823 -9.6% Number of Feet 200000 -10% Oct-18 66,665 57,872 -8793 -13.2% 150000 Nov-18 87,331 Dec-18 107,997 100000 Jan-19 128.663 50000 Feb-19 149.329 Mar-19 169.995 0 AU018 Nov.18 Decite Janas Febria Maria 500 18 18 Apr-19 190,661 Jun. sha May-19 211,327 Approved Budget / Planned Actual Jun-19 232,000 **Target and Acceptable Variance** Acceptable Variance ± 10%

SOURCE OF DATA: FI 26331, Job 30067

1. BACKGROUND / PURPOSE

 Mainline replacement is a portion of the Water System's strategy to maintain reliability, to reduce leaks and minimize interruptions and damage to the community.

3. <u>PERFORMANCE / VARIANCE ANALYSIS</u> <u>& YEAR END PROJECTION</u>

The rate of mainline replacement slightly dipped outside the acceptable variance range for this reporting period due to field staffing and training of new field personnel, and traffic control challenges at jobs on major streets resulting to less mainline footage installed.

2. ACHIEVEMENTS / MILESTONES MET

57,872 feet of mainline were installed.

4. <u>MITIGATION PLAN AND / OR</u> <u>RECOMMENDATIONS</u>

 Continue with planned hiring and training for mainline crews to reach the replacement rate of 300,000 feet of pipe per year, resulting in a replacement cycle of 120 years.



REPORTING PERIOD: October 2018

LADWP RATES METRIC - TRUNK LINE REPLACEMENT (Water)

REPORTING PERIOD: October 2018

44

DEFINITION OF RATES METRIC: Feet of trunk line replaced against the plan. TARGET & ACCEPTABLE VARIANCE (FY 18/19): 7,700 feet, 10 percent

FYTD	Linear Feet of TL	Actual Linear Feet	Vari	iance	Re-Estimate		Trunk Line Replacement
as of:	Planned	of TL Replaced	ft	%	(If Applicable)	9000 -	FY 18/19 +10
Jul-18	357	357	0	0.0%		8000 -	
Aug-18	929	929	0	0.0%		7000	
Sep-18	1,285	1,285	0	0.0%		6000	-10
Oct-18	1,622	1,622	0	0.0%		0000	,
Nov-18	1,970				1,817	T 4000	
Dec-18	2,510			1	2,473	° 3000 -	,
Jan-19	3,556				3,744	2000 -	
Feb-19	4,611	1		-	5,025	1000 -	/
Mar-19	5,552			1	6,167	o +	· · · · · · · · · · · ·
Apr-19	6,186				6,937	white	* 10 30 10 10 10 10 10 10 10 10 10 10 10 10 10
May-19	6,923				7,832		
Jun-19	7,700				8,776		Linear Feet of TL Planne
-	Accepta	ole Variance	±	10%	14.0%		Target and Acceptable Variance

SOURCE OF DATA: FI 23150 - Job 51054; FI 23222 - Jobs 23204, 23117; FI 26220 - Jobs 23137, 23549; FI 29130 - Jobs 20058, 23202; FI 29140 - Job 41026

1. BACKGROUND / PURPOSE

RESPONSIBLE MANAGER: Susan Rowghani

 Trunk Lines are a major component of the Water System infrastructure system. Rehabilitation and replacement are necessary to maintain reliable supply and safe operation of the system.

2. ACHIEVEMENTS / MILESTONES MET

- Upper Stone Canyon Reservoir WQIP and Foothill Trunk Line reached 50% Construction in July 2018.
- Groundbreaking on MWD LA-30 Connection (Venice) occurred in September 2018.
- Fletcher Pump Station Suction Line Replacement reached 60% Design in September 2018.
- Trunk Line Construction crews completed 50% Construction on City Trunk Line South Unit 3 in October 2018.

3. <u>PERFORMANCE / VARIANCE ANALYSIS</u> <u>& YEAR-END PROJECTION</u>

- Groundbreaking on Fletcher Pump Station Suction Line Replacement is scheduled for January 2019 with 100% Construction completion expected in June 2019.
- Installation of Trunk Line on the Green Verdugo Reservoir Floating Cover Replacement project and the Machado Lake Pipeline Project is scheduled to start in early 2019.
- A larger amount of pipe installation on the Machado Lake Pipeline project and the LA Reservoir UV Disinfection Plant project than was originally estimated has increased the overall Fiscal Year goal.
- 4. <u>MITIGATION PLAN AND / OR</u> <u>RECOMMENDATIONS</u>
 - On target

LADWP RATES METRIC - METER REPLACEMENT (Water)

RESPONSIBLE MANAGER: Breonia Lindsey/Sandra Foster

DEFINITION OF RATES METRIC: Number of meters replaced against plan. TARGET & ACCEPTABLE VARIANCE (FY 18/19): 31,500 meters, 10% REPORTING PERIOD: October 2018

45

STATUS: Within Acceptable Variance

FYTD	Approved Budget /	Actual	Varia	ance	Re-Estimate	Meter Replacement
as of:	Planned		Meters	%	(If Applicable)	FY 18/19
Jul-18	2,050	2,005	-45	-2.2%		35000 +
Aug-18	4,675	4,619	-56	-1.2%		
Sep-18	6,725	6,693	-32	-0.5%		25000
Oct-18	8,775	9,097	322	3.7%		
Nov-18	10,825					້ວ 20000 ອ
Dec-18	13,665		1		1	15000 10000
Jan-19	16,505		1			z 10000
Feb-19	19,345					5000
Mar-19	22,185					
Apr-19	25,025					JANY & Day Berry OCH NON Decy Jam teor War berry May Jan
May-19	27,865	/				
Jun-19	31,500					Approved Budget / Planned Actual
	Acceptal	ble Variance	±	10%		Target and Acceptable Variance

SOURCE OF DATA: FI 27215, Job 30053

1. BACKGROUND / PURPOSE

 Accurate meter reading is necessary to ensure reliable and accurate billing. This metric measures both the replacement of infrastructure assets and our commitment to accurate meter reading and billing.

3. <u>PERFORMANCE / VARIANCE ANALYSIS</u> <u>& YEAR END PROJECTION</u>

 The rate of meter replacement for this reporting period exceeded the target, which is an indication that the Division is set to meet its fiscal year goal of replacing 31,500 meters.

2. ACHIEVEMENTS / MILESTONES MET

 9,097 meters of the 31,500 fiscal year goal have been replaced.

4. <u>MITIGATION PLAN AND / OR</u> <u>RECOMMENDATIONS</u>

 The goal was increased to ensure the ability to meet CISCON settlement requirements and industry standards on meter life cycle

46 LADWP RATES METRIC – WATER QUALITY CAPITAL BUDGET VS ACTUAL

(Water)

RESPONSIBLE MANAGER: Susan Rowghani DEFINITION OF RATES METRIC: Board approved annual budget vs actual expenditures. TARGET & ACCEPTABLE VARIANCE (FY 18/19): \$293,823K, 10 percent

FYTD	Approved Budget /	Actual	Vari	ance	Re-Estimate		Water Quality Budget - Capital
as of:	Planned		\$	%	(If Applicable)	350000	FY 18/19
Jul-18	9,064	9,062	-2	0.0%			
Aug-18	25,731	25,730	-1	0.0%		300000	¢
Sep-18	41,368	41,368	0	0.0%		250000	-109
Oct-18	64,679	56,744	-7,935	-12.3%		S000 200000	
Nov-18	85,962					ਜ਼ੇ _⊑ 150000	
Dec-18	107,588					100000	
Jan-19	131,269						
Feb-19	152,619		1			50000	
Mar-19	174,268					0	
Apr-19	196,667					UI19 10	1 5 50' Oct Nor Dec Jan 8 50' Nor Nor Nay Jun 19
May-19	217,803					2. 40.	
Jun-19	293,821				1.1.1.1.1.1.1		Approved Budget / Planned Actual Target and Acceptable Variance

SOURCE OF DATA: FIs 23222, 24130, 24310, 24316, 27215, and 29130.

1. BACKGROUND / PURPOSE

This metric measures the Water System's progress towards meeting mandated water quality regulations.

2. ACHIEVEMENTS / MILESTONES MET

- Upper Stone Canyon Reservoir Water Quality Improvement project reached 50% Construction in July 2018
- RSC 5 & 6 completed 100% Construction in July 2018.
- Elysian Reservoir WQIP completed 100% . Construction in July 2018.
- Hollywood Temporary Corrosion Control 0 Station completed 100% Construction in August 2018.
- RSC 7 contract was awarded in September 2018.
- Construction at MWD LA-30 started in September 2018.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR-END PROJECTION

- LAAFP Oxygen Generation System Upgrade and RSC 7 will begin construction in January 2019.
- Planning has started on the System-Wide Chloramination Trailer Project and the System-Wide Tank Mixer Improvement Project. Design will ramp up by December 2018.
- MWD Solids Handling Lagoons is expected to complete 100% Construction in December 2018.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

Work on RSC 7 and LAAFP Oxygen Generation System Upgrade will ramp up with construction starting in early 2019.

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

RESPONSIBLE MANAGER: Steven R. Cole SML

REPORTING PERIOD: October 2018

DEFINITION OF RATES METRIC: Board approved annual budget vs actual expenditures. TARGET & ACCEPTABLE VARIANCE (FY 18/19): \$99,257K, 10 percent

STATUS: Within Acceptable Variance

FYTD	Approved Budget /	Actual	Vari	ance	Re-Estimate	Water Quality Budget - O&M
as of:	Planned		\$	%	(If Applicable)	FY 18/19
Jul-18	6,772	6,772	0	0.0%		
Aug-18	16,162	16,162	0	0.0%		100000
Sep-18	23,871	23,870	-1	0.0%		x 80000
Oct-18	32,248	31,704	-544	-1.7%		00
Nov-18	40,624			·		F 60000
Dec-18	49,000					× 40000
Jan-19	57,376					
Feb-19	65,753					20000
Mar-19	74,129					0+
Apr-19	82,506					Introd Bedro Oct 100, 100, 100, 100, 100, 100, 100, 100
May-19	90,882					
Jun-19	99,257					- Approved Budget / Planned Actual
1	Acceptable	e Variance	• ±	10%	1 and 1	Target and Acceptable Variance

SOURCE OF DATA: Fis 3212500, 3212520, 3212530, 3212540, 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. <u>PERFORMANCE / VARIANCE ANALYSIS</u> <u>& YEAR END PROJECTION</u>

 All Water Quality O&M Budgets are on target.

4. <u>MITIGATION PLAN AND / OR</u> <u>RECOMMENDATIONS</u>

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

Exceeds Target

LADWP RATES METRIC - BUDGET VS ACTUAL FOR OWENS LAKE 0&M Muchael & Grokel [Water]

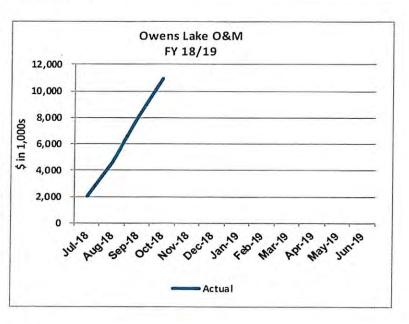
RESPONSIBLE MANAGER: Michael Grahek

REPORTING PERIOD: October 2018

DEFINITION OF RATES METRIC: Board approved annual budget vs. actual expenditures TARGET & ACCEPTABLE VARIANCE (FY 18/19): N/A – for information only

STATUS: Information Only

FYTD as of:	Actual
Jul-18	2,079
Aug-18	4,629
Sep-18	8,074
Oct-18	10,922
Nov-18	
Dec-18	
Jan-19	
Feb-19	
Mar-19	
Apr-19	
May-19	
Jun-19	



SOURCE OF DATA: Fls 3022002 and 4013006

1. BACKGROUND / PURPOSE

 Proper operation and maintenance of dust control facilities at Owens Lake is necessary to comply with regulatory requirements. Dust control is a regulatory mandate to ensure air quality in the area.

2. ACHIEVEMENTS / MILESTONES MET

- Crews completed 5 miles of road maintenance work.
- Crews removed 10 miles of emergency flood protection installed in 2017 to protect infrastructure from possible flood damage. Retilled area T-16 as part of required maintenance.
- Crews completed installed protection berms in T-29-3 and T-11 to enhance water savings.

3. <u>PERFORMANCE / VARIANCE ANALYSIS</u> <u>& YEAR END PROJECTION</u>

On target

4. <u>MITIGATION PLAN AND / OR</u> <u>RECOMMENDATIONS</u>

- Staff will continue to monitor O&M expenditures to ensure efficient operations of dust control activities and appropriate Capital vs O&M expenditures.
- Continue to hire staff.

Joint System

LADWP RATES METRIC - Total FTEs Against Plan

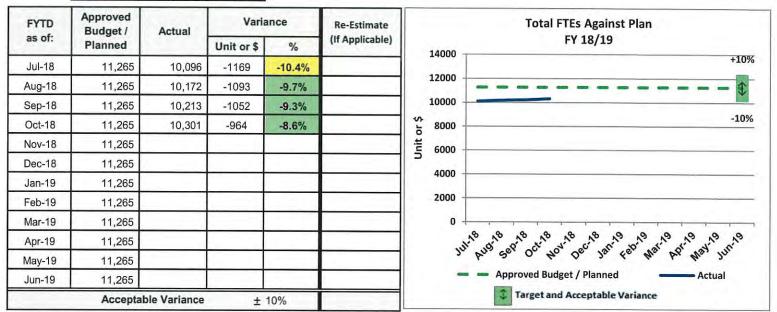
RESPONSIBLE MANAGER: Shannon C. Pascual

REPORTING PERIOD: October 2018

DEFINITION OF RATES/EQUITY METRIC: Total number of occupied full-time equivalent (FTE) positions vs. annual Authorized Personnel Resolution

TARGET & ACCEPTABLE VARIANCE (FY 18/19): +/- 10%

STATUS: Within Acceptable Variance



SOURCE OF DATA: Monthly Staffing Report

1. BACKGROUND / PURPOSE

HR will track LADWP's progress in achieving the staffing levels necessary to accomplish the strategic goals set forth in the Water and Power Rate Ordinances.

2. ACHIEVEMENTS / MILESTONES MET

- External Hires = 120
- Attrition =
- Net New Employees = 99

3. <u>PERFORMANCE / VARIANCE ANALYSIS</u> <u>& YEAR END PROJECTION</u>

LADWP's staffing level continues to increase due to ongoing hiring to meet staffing needs.

HR expects to remain within the acceptable limits by the year-end.

4. <u>MITIGATION PLAN AND / OR</u> <u>RECOMMENDATIONS</u>

N/A

21

LADWP RATES METRIC – *Financial and Human Resources Replacement Project Total Spending Against Plan (Joint)*

RESPONSIBLE MANAGER: STEPHAN TUCKER

REPORTING PERIOD: Thru September 30, 2018

50

DEFINITION OF RATES METRIC: Board approved annual budget vs. actual expenditures (\$ thousand) TARGET & ACCEPTABLE VARIANCE (FY 18/19): FY 18/19 Board Approved Budget-October 2018; +/-20%

STATUS: Outside Acceptable Variance

FYTD	Approved Budget /	Actual	Varia	ance	Re-Estimate	1000	Financial & Human Resources Replacement Project Tota Spending Against Plan
as of:	Planned		Unit or \$	%	(If Applicable)	45000	FY 18/19 +15%
Jul-18	811.0	192.9	-618	-76.2%		40000	
Aug-18	2,209.0	1,067.6	-1141	-51.7%		35000	\$
Sep-18	3,304.0	1,637.5	-1667	-50.4%		¥ 30000	
Oct-18	4,454.1	2,424.8	-2029	-45.6%		5 30000	/-15%
Nov-18	5,654.1					20000	1
Dec-18	6,854.1		1			\$ 15000	
Jan-19	8,554.1		0 0			10000	
Feb-19	10,254.1					5000	
Mar-19	11,954.1			-		0 +	
Apr-19	13,654.1					white a	Prove Cor Nor Dec, Par, tep, Mar, bor, May, Jours
May-19	16,754.1		· · · · · · · · · · · · · · · · · · ·			2.	
Jun-19	35,768.6			L	15	-	- Approved Budget / Planned - Actual
	Accepta	ble Variance	±	15%	-100.0%		Target and Acceptable Variance

SOURCE OF DATA: FI 29401 (Job Z4905) and FI 28974 (Job U2293 and Job U2295)

1. BACKGROUND / PURPOSE

- This program is to modernize technology and business processes according to leading practices and replace all legacy financial services and human resources management systems; and enhance or replace procurement and inventory management systems.
- This report provides visibility for program performance to ensure this multi-year system replacement project will complete within the Board-approved budget.
- The Budget System Replacement (BSR) Project will provide an early and interim implementation of a budget and decision support solution, but it is not necessarily the final solution. Despite the limitations to capture transactions and perform analysis using the existing mainframe financial applications, this interim solution is a first step to integrate the budget system, financial planning, and rates models established during the 2016 rate enabling LADWP to more efficiently and effectively evaluate and communicate its implementation of the 2016 rate action and to establish the basis for the next rate case to ensure continued financial stability.

2. ACHIEVEMENTS / MILESTONES MET

- ERP: Enterprise Technology Advisory Services request for qualifications was released on January 11, 2018. Recommendation of Qualification Award anticipated February 2019.
- ERP: In September 2018, Gartner, Inc. was tasked with conducting a comprehensive review and risk assessment of LADWP's HRMS software.
- BSR: RFP No. 90451 was released on March 9, 2018 with award planned for November 2018.
- ERP: Scheduled requirements review workshops with Gartner, Inc.
- PROGRAM HIRING: As of September 30, 2018

 40 of 69 authorized positions have been filled.
 Hiring is underway to appoint additional personnel to various orgs (FSO, HR, ITS, SCS, and CPM). For BSR, in addition to Budget Office SMEs, as of September 30, 2018, 2.5 authorized positions are filled within FSO and there is a plan to fill 1 authorized position from IT.

3. <u>PERFORMANCE / VARIANCE ANALYSIS</u> <u>& YEAR END PROJECTION</u>

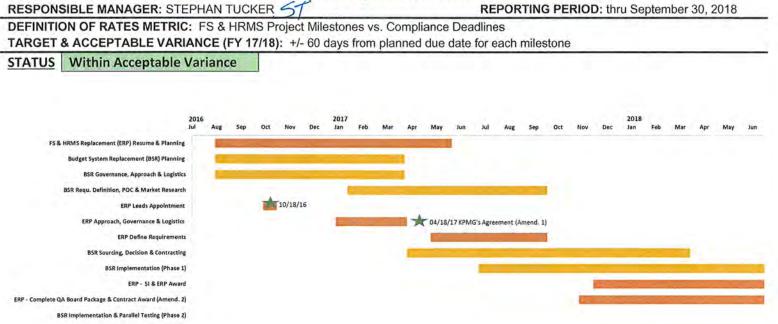
- Actual spending is well below approved budget because contracts have not yet been established to buy ERP software and hire a systems implementation consulting team. Therefore actual spending on both projects will be well below \$35 million approved for FY 18/19.
- Executive management determined LADWP's interests are best served by soliciting software purchase separately from system integrator services. Therefore, two procurements will be completed sequentially. Adjustments to budgetary cash flows are being proposed for LADWP Board of Commissioners approval.
- ERP labor expenditures are below approved budgets as hiring is ongoing to fill 69 newly authorized positions.
- BSR: Expenditures are below as Contract Award is being delayed to November 2018. FSO is working with SCS and PEC, which includes representatives from ITS, Water, Power & Joint, to expedite the rebid, selection and contract award of the BSR RFP.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

- CPMO are developing a detailed implementation plan that will update Program milestones and budgetary cash flows that reflect current strategy for sourcing and selection of software, system integrator services, and other support services (OCM, technical, and IV&V). These updates will be available by Q1 2019.
- BSR: Continue working with SCS and PEC towards the selection and award of the contract for software and integration services. Finalize the end-to-end reviews, processes maps and reports and templates inventory prior to the arrival of the System Integrator expected for November 2018.

Within Acceptable Variance

LADWP RATES METRIC – *Financial and Human Resources Replacement Project Progress Against Schedule (Joint)*



BSR Implementation - Preparation to Go-Live

MILESTONE/DEADLINE DESCRIPTION	PLANNED	ACTUAL	ACCEPTABLE VARIANCE (+/- 60 DAYS FROM PLANNED)	
ERP - Resume with Executive Sponsors' Meeting	10/18/16	10/18/16	12/17/16	8/19/16
BSR - Complete Planning	3/31/17	05/15/17	5/30/17	1/30/17
BSR - Define Approach, Governance & Logistics	3/31/17	05/15/17	5/30/17	1/30/17
BSR - Define Requirements & Differentiation Demos	9/30/17	10/25/2017	11/29/17	8/1/17
ERP - Identify Financial, HR, IT Leads	10/18/16	10/18/16	12/17/16	8/19/16
ERP - Complete Revision to KPMG's Agreement (Amend. 1)	3/31/17	04/18/17	5/30/17	1/3017
ERP – Complete Requirements Definition	9/30/17	2/1/2018	11/29/17	8/1/17
BSR – Sourcing, Complete Board Package & Contract Approval	3/31/18	IN PROGRESS	5/30/18	1/30/18
BSR - Finish Implementation Phase 1	12/31/18		3/1/19	11/1/18
ERP - Complete SI & ERP Award	3/12/19		5/11/19	1/11/19
ERP - Complete QA Board Package & Contracts Award (Amend. 2)	1/27/18		3/26/18	11/28/17
BSR- Finish Implementation Phase 2	6/30/19		8/29/19	5/1/19
BSR - Go-Live	7/1/19		8/30/19	5/2/19

SOURCE OF DATA: FI 294-01 (Job Z4905) and FI 289-74 (Job U2293) - PM Core Team & KPMG

1. BACKGROUND / PURPOSE

- This program is to modernize technology and business processes according to leading practices and replace all legacy financial services and human resources management systems; and enhance or replace procurement and inventory management systems.
- This report provides visibility for program performance to ensure this multi-year system replacement project will complete within the Board-approved budget.
- The Budget System Replacement (BSR) Project will provide an early and interim implementation of a budget and decision support solution, but it is not necessarily the final solution. Despite the

limitations to capture transactions and perform analysis using the existing mainframe financial applications, this interim solution is a first step to integrate the budget system, financial planning, and rates models established during the 2016 rate enabling LADWP to more efficiently and effectively evaluate and communicate its implementation of the 2016 rate action and to establish the basis for the next rate case to ensure continued financial stability.

51

2. ACHIEVEMENTS / MILESTONES MET

- ERP: Enterprise Technology Advisory Services request for qualifications was released on January 11, 2018. Recommendation of Qualification Award anticipated February 2019.
- ERP: In September 2018, Gartner, Inc. was tasked with conducting a comprehensive review and risk assessment of LADWP's HRMS software.
- BSR: RFP No. 90451 was released on March 9, 2018 with award planned for November 2018.
- ERP: Scheduled requirements review workshops with Gartner, Inc.
- PROGRAM HIRING: As of September 30, 2018

 40 of 69 authorized positions have been filled.
 Hiring is underway to appoint additional personnel to various orgs (FSO, HR, ITS, SCS, and CPM). For BSR, in addition to Budget Office SMEs, as of September 30, 2018, 2.5 authorized positions are filled within FSO and there is a plan to fill 1 authorized position from IT.

3. <u>PERFORMANCE / VARIANCE ANALYSIS</u> & YEAR END PROJECTION

- Actual spending is well below approved budget because contracts have not yet been established to buy ERP software and hire a systems implementation consulting team. Therefore actual spending on both projects will be well below \$35 million approved for FY 18/19.
- Executive management determined LADWP's interests are best served by soliciting software purchase separately from system integrator services. Therefore, two procurements will be completed sequentially. Adjustments to budgetary cash flows are being proposed for LADWP Board of Commissioners approval.
- ERP labor expenditures are below approved budgets as hiring is ongoing to fill 69 newly authorized positions.
- BSR: Expenditures are below as Contract Award is being delayed to November 2018. FSO is working with SCS and PEC, which includes representatives from ITS, Water, Power & Joint, to expedite the rebid, selection and contract award of the BSR RFP.

4. <u>MITIGATION PLAN AND / OR</u> <u>RECOMMENDATIONS</u>

- CPMO are developing a detailed implementation plan that will update Program milestones and budgetary cash flows that reflect current strategy for sourcing and selection of software, system integrator services, and other support services (OCM, technical, and IV&V). These updates will be available by Q1 2019.
- BSR: Continue working with SCS and PEC towards the selection and award of the contract for software and integration services. Finalize the end-to-end reviews, processes maps and reports and templates inventory prior to the arrival of the System Integrator expected for November 2018.

LADWP RATES METRIC – LADWP EMPLOYEE COST BUDGET VS. ACTUAL

(LADWP)

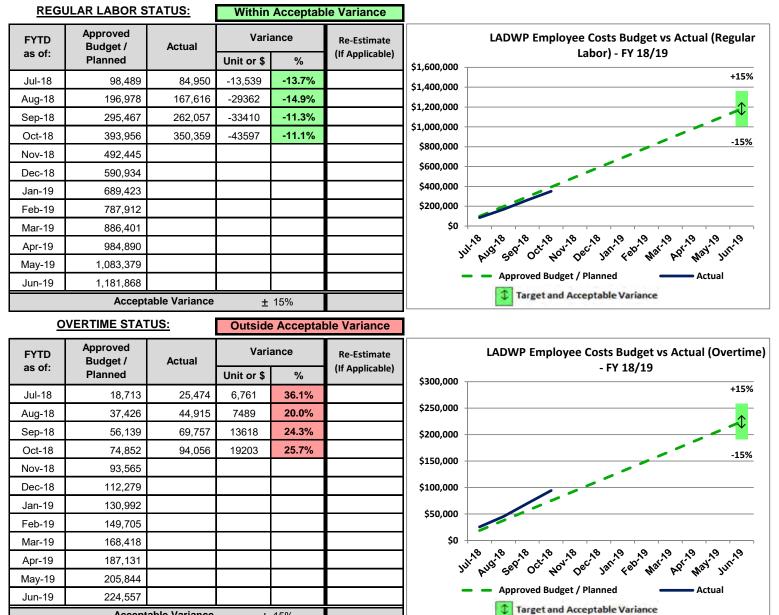
RESPONSIBLE MANAGER: LADWP Senior Management

REPORTING PERIOD: October 2018

DEFINITION OF RATES METRIC: LADWP employee costs (including regular labor, overtime, pension and healthcare, excluding daily exempt and Utility Pre-Craft Trainee) budget vs. actual (\$M)

TARGET & ACCEPTABLE VARIANCE (FY 17/18): +/- 15%

SOURCE OF DATA: Budget Reporting System (BRS) - Rates Metrics Report



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± 15%

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Employee Cost Category	Budget	Actual	Variance	Variance %	FY 17/18 Approved
Regular Labor	393,956	350,359	-43,597	-11.1%	1,181,868
Overtime	74,852	94,056	19,203	25.7%	224,557
Regular Labor + Overtime	468,808	444,415	-24,393	-5.2%	1,406,425
Health Care Allocation	111,254	105,028	-6,226	-5.6%	333,763
Retirement & Death Benefit	177,126	164,022	-13,104	-7.4%	531,377
Total	757,188	713,465	-43,723	-5.8%	2,271,565

LADWP RATES METRIC – *Total Number of Water and Power Employees* per Customer Meter (Joint)

RESPONSIBLE MANAGER: Corporate Performance

REPORTING PERIOD: October 2018

53

DEFINITION OF RATES METRIC: Total number of water and power employees (excluding daily exempt and utility pre-craft trainees) per water and power meters

TARGET & ACCEPTABLE VARIANCE (FY 18/19): No Target

STATUS: Information Only

SOURCE OF DATA: LADWP Monthly Staffing Report, Customer Care and Billing (CCB) System

1. BACKGROUND / PURPOSE

On May 5, 2017, the Board of Water and Power Commissioners approved Resolution 017252 adding the Total Number of Water and Power Employees per Customer Meter metric to the LADWP Rates Metrics. This metric measures the total number of water and power employees (excluding daily exempt and utility pre-craft trainees) per water and power meter. This metric does not have a target and is provided as Information Only.

2. ACHIEVEMENTS / MILESTONES MET

Data for the number Total Number of Water and Power Employees is obtained from the LADWP Monthly Staffing Report provided by Human Resources Division.

Data for the total number of water and power meters is obtained through a query of the CCB system and provided by Information Technology Services. It is important to note that the data for total number of water and power meters is point-in-time which means that the data represents the number of meters at the exact date and time the query was executed. Additionally, data for the number of water and power meters cannot be obtained for past dates and times. An automated query captures this data on the last date of every month.

3. <u>PERFORMANCE / VARIANCE ANALYSIS</u> <u>& YEAR END PROJECTION</u>

As of October 2018:

Total Number of Water and Power Employees per Customer Meter 10,301/2,285,406 = .0045

Total Number of Water and Power Employees (excluding daily exempt and utility pre-craft trainees) as of October 2018.

System	Occupied		
Power	4,268		
Water	2,020		
Joint	4,013		
Total	10,301		

Total Number of Water and Power Meters as of November 2, 2018.

	Total	No. Meter On	No. Meter Off	
Power	1,579,427	1,542,495	36,932	
Water	705,979	682,986	22,993	
Total	2,285,406	2,225,481	59,925	

*Meter data for month end was not available for July 2017 through November 2017.

4. <u>MITIGATION PLAN AND / OR</u> <u>RECOMMENDATIONS</u>

Continue to provide this dashboard to the Board of Water and Power Commissioners and the Office of Public Accountability for review.

⁵⁴ LADWP RATES METRIC – *GHG Emissions Reduction Ratio (Joint)*

RESPONSIBLE MANAGER: Mark Sedlacek

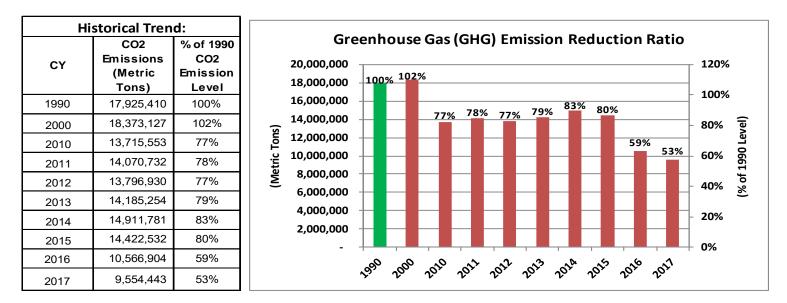
REPORTING PERIOD: As of December 2018

DEFINITION OF RATES METRIC: Current Year GHG Emissions /1990 GHG Emissions **TARGET & ACCEPTABLE VARIANCE (CY 2017):** 70%; +5%

STATUS:

Exceeds Target

- CY 2017 Target: 70% of 1990 GHG Emission level
- CY 2017 Acceptable Variance: + 5%



SOURCE OF DATA: Federal and state mandatory reporting compliance reports

1. BACKGROUND / PURPOSE

• The State of California has adopted targets to reduce GHG emissions to 1990 levels by 2020 and to ultimately achieve an 80% reduction from 1990 levels by 2050. GHG reduction efforts from the electricity sector, including LADWP, are a critical component in meeting these targets.

2. ACHIEVEMENTS / MILESTONES MET

- Early divestiture of Navajo Generating Station in July 2016.
- Beginning January 1, 2016, incorporated carbon cost when determining optimal economic dispatch for individual generating units, which increased use of natural gas over coal resources.
- LADWP's electricity supply in 2017 included 30% renewable energy.
- LADWP's 2017 emissions are 47 percent below its 1990 emissions baseline.

3. <u>PERFORMANCE / VARIANCE ANALYSIS</u> <u>& YEAR END PROJECTION</u>

• No variance explanation needed.

4. <u>MITIGATION PLAN AND / OR</u> <u>RECOMMENDATIONS</u>

• No mitigation needed. 2017 emissions were significantly reduced as a result of measures listed under #2.

LADWP RATES METRIC - *Energy Savings Variance Report (Joint)*

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RESPONSIBLE MANAGER: David Jacot

REPORTING PERIOD: July thru October 2018

Title of Rates Metric FY 18/19 55

+15%

Maying

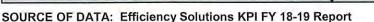
Jun 19

Actual

DEFINITION OF RATES METRIC: Energy Savings Against Plan TARGET & ACCEPTABLE VARIANCE (FY 18/19): GWh Installed Compared to the 210 baseline/GWh for all customers. 15%

STATUS: Outside Acceptable Variance

FYTD	Energy Savings	Actual	Varia	Variance		
as of:	Goals (GWh)	Actual	Unit or \$	%	(If Applicable)	
Jul-18	8	32.5	25	311.4%		
Aug-18	24	65.6	42	175.6%		
Sep-18	48	106.8	59	124.8%		
Oct-18	71	138	67	93.5%		
Nov-18	103					
Dec-18	135					
Jan-19	166					
Feb-19	206					
Mar-19	246					
Apr-19	293					
May-19	341					
Jun-19	396				15	
	Acceptab	le Variance	±	: 15%	-96.2%	

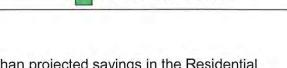


1. BACKGROUND / PURPOSE

Efficiency Solutions' (ES) energy savings goals are a key performance metric related to the Energy Cost Adjustment Factor, a critical power rate component. Energy Savings are compiled monthly into a Key Performance Indicators database encompassing measures installed by participants in ES programs and initiatives. The OPA has requested this metric be reported to the Board and the OPA on a regular basis, ensuring actual savings are tracking established targets.

2. ACHIEVEMENTS / MILESTONES MET

Direct Install Programs, Commercial Lighting, New Construction, HVAC Optimization and other Commercial /Industrial programs all delivered energy savings considerably above projections through the first quarter. A generous new residential Insulation rebate offer was added to the Consumer Rebate Program (CRP) in September 2018, targeting older, poorly insulated residential buildings. Participation in CRP, HVAC Optimization, and the Refrigerator Exchange programs is robust, driving higher



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Energy Savings Goals (GWh)

Target and Acceptable Variance

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than projected savings in the Residential program sector for the first quarter.

3. <u>PERFORMANCE / VARIANCE ANALYSIS</u> <u>& YEAR END PROJECTION</u>

FY 17-18 cumulative energy savings exceeded the annual target. FY 18-19 savings are expected to continue this trend if the first quarter results are an indication of future program performance. The variance is likely due, however, to increased staffing which allowed projects in the pipelines to be processed.

4. <u>MITIGATION PLAN AND / OR</u> <u>RECOMMENDATIONS</u>

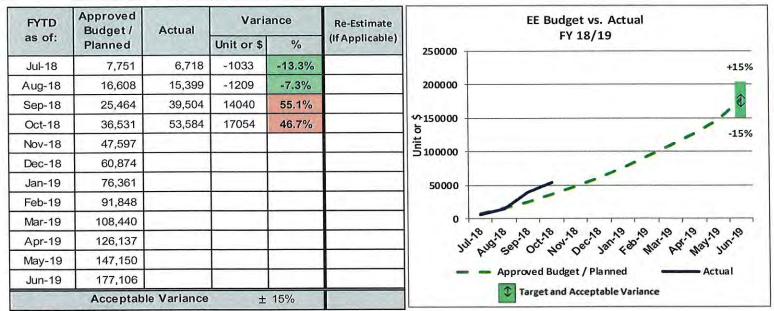
ES staffing vacancies continue to be filled in FY 2018-19, ensuring that incentive delivery will keep pace with participant demand and new programs will proceed into the delivery pipeline.

LADWP RATES METRIC - BUDGET VARIANCE ENERGY EFFICIENCY (JOINT) **RESPONSIBLE MANAGER: David Jacot**

REPORTING PERIOD: July thru October 2018

56

DEFINITION OF RATES METRIC: Budget vs. Actual for the overall Energy Efficiency Portfolio TARGET & ACCEPTABLE VARIANCE (FY 18/19): +/- 15%



SOURCE OF DATA: KPI FY 18-19

1. BACKGROUND / PURPOSE

Efficiency Solutions' (ES) energy savings goals are a key performance metric related to the Energy Cost Adjustment Factor, a critical power rate component. Energy Savings are compiled monthly into a Key Performance Indicators database encompassing measures installed by participants in ES programs and initiatives. The OPA has requested this metric be reported to the Board and the OPA on a regular basis, ensuring actual spending to meet the Energy Efficiency targets are tracking to established budgets.

2. ACHIEVEMENTS / MILESTONES MET

- Custom Performance Program has launched program improvements.
- Consumer Rebate Program has been processing applications and paying generous incentives for the new residential Insulation offer.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

Actual ES charges and payments tracked slightly under expenditure targets for the first two months of 2017-18 but ramped up in September and October as staff was added to fill vacancies. Total spending is expected to be close to projections by year end.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

Continue ramp up of planned EE programs, including Phase II of the Residential Insulation Program and a launch of the Upstream Commercial Food Service Program. Overtime has decreased as vacancies are filled but will be monitored to ensure expenditures track to budget.

Exceeds Target

LADWP RATES METRIC - Levelized EE Program Costs (\$/KWH) (Joint)

RESPONSIBLE MANAGER: David Jacot

REPORTING PERIOD: July thru October 2018

DEFINITION OF RATES METRIC: Cost per kWh over lifetime of installed energy efficiency solutions or measures. TARGET & ACCEPTABLE VARIANCE (FY 17/18): Annual metric: Levelized Cost \$.0.082 +/- 15%

STATUS Within Acceptable Variance

SOURCE OF DATA: E3 Report for FY 16/17

1. BACKGROUND / PURPOSE

Efficiency Solutions' (ES) Levelized EE Program costs (\$/kWh) are a key performance metric related to the Energy Cost Adjustment Factor, a key rate component. The OPA has requested this metric be reported to the Board and the OPA on a regular basis, ensuring actual Levelized EE Program costs are tracking established targets.

Life of efficiency measures vary from one to thirty years. The Levelized cost of LADWP's efficiency program portfolio is calculated once per year (the most recent is FY 16-17) using the Energy Efficiency Reporting Tool developed by Environmental Economics (E3) and KEMA and is used by all SCPPA members in reporting annual energy savings and expenditures to the California Energy Commission (CEC).

2. ACHIEVEMENTS / MILESTONES MET

The Levelized cost of LADWP's energy efficiency portfolio for FY 16-17 was \$0.0242 per kWh saved resulting in a variance of -70.5% from the established \$0.082 FY 16-17 target.

3. <u>PERFORMANCE / VARIANCE ANALYSIS</u> <u>& YEAR END PROJECTION</u>

LADWP's portfolio of energy efficiency programs has historically been very cost effective.

For FY 18-19 we expect our EE Program portfolio Levelized cost to increase as our spending on upstream and direct install programs increase. We expect it to come in well below the \$0.082 target.

4. <u>MITIGATION PLAN AND / OR</u> <u>RECOMMENDATIONS</u>

Continue ramp up of planned EE programs, including Phase II of the Residential Insulation Program and a launch of the Upstream Commercial Food Service Program.

LADWP Employee Costs Budget vs. Actual (\$M) Detail

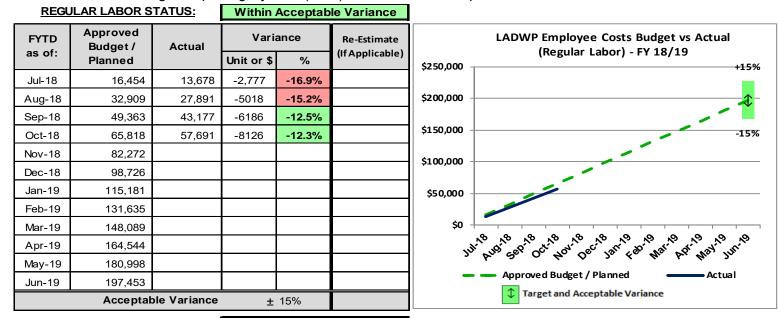
LADWP RATES METRIC – *LADWP EMPLOYEE COST BUDGET VS. ACTUAL* (Chief Administrative Officer)

RESPONSIBLE MANAGER: Bradley J. Hudson/Donna I. Stevener

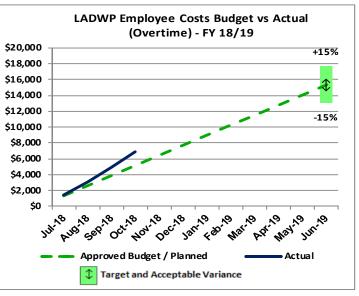
REPORTING PERIOD: October 2018

DEFINITION OF RATES METRIC: LADWP CAO System employee costs (including regular labor, overtime, pension and healthcare, excluding daily exempt and Utility Pre-Craft Trainee) budget vs. actual (\$M) **TARGET & ACCEPTABLE VARIANCE (FY 18/19):** +/- 15%

SOURCE OF DATA: Budget Reporting System (BRS) - Rates Metrics Report



<u>0</u>	VERTIME STAT	rus:	Outside Acceptable Variance			
FYTD	Approved Budget /	Actual	Varia	ance	Re-Estimate	
as of:	Planned		Unit or \$	%	(If Applicable)	
Jul-18	1,280	1,463	183	14.3%		
Aug-18	2,560	3,037	477	18.6%		
Sep-18	3,840	4,959	1119	29.2%		
Oct-18	5,119	6,861	1742	34.0%		
Nov-18	6,399					
Dec-18	7,679					
Jan-19	8,959					
Feb-19	10,239					
Mar-19	11,519					
Apr-19	12,799					
May-19	14,078					
Jun-19	15,358					
	Acceptat	ole Variance	±	15%		



Employee Cost Category	Budget	Actual	Variance	Variance %	FY 18/19 Approved
Regular Labor	65,818	57,691	-8,126	-12.3%	197,453
Overtime	5,119	6,861	1,742	34.0%	15,358
Regular Labor + Overtime	70,937	64,552	-6,385	-9.0%	212,811
Health Care Allocation	18,567	16,346	-2,220	-12.0%	55,700
Retirement & Death Benefit	29,558	25,551	-4,008	-13.6%	88,675
Total	119,062	106,449	-12,613	-10.6%	357,185

- Chief Administrative Officer (CAO) Corporate Services organizations include Business Support Services (BSS), Equal Employment Opportunity Services (EEOS), Human Resources (HR), Labor Relations Office (LRO), Leadership in Energy and Efficiency Design (LEED), and Real Estate Services (RES).
- The CAO Technology and Security Services organizations include Information Technology Services Division (ITSD), Customer Billing and System Support (CBSS), Meter Services and Field Operations (MSFO), and Supply Chain Services (SCS).
- The purpose of these organizations include operations in general administrative support, equal employment training and investigations, purchasing and material services, information and technology support and cyber security, work space management and planning, employment services, labor relations, customer billing, and metering and field support.
- The overall variance for these organizations for fiscal-year-to-date, July 2018 through October 2018, is a combined 9 percent underrun for total budgeted dollars for labor and overtime (labor at 12 percent underrun and overtime at 34 percent overrun).

2. ACHIEVEMENTS / MILESTONES MET

- CBSS continues to process settlement claims and is expanding their team of Utility Accountants.
- EEOS hired three Utility Administrators to respond to EEO claims and process cases.
- HR is on track to submit 62 exam requests this year; provided 20 Lunch N' Learn seminars and organized fairs (health and wellness) for employees; and Workers' Compensation achieved a passing score of 99.3% for the State Audit of the Department's Utilization Review Process and an exceptional score of 0.84652 for the 2018 State of CA Department of Industrial Relations Profile Audit Review.
- Several ITSD groups continue to operate on a 24/7 basis to support the Department's network connectivity, integrity and security.
- MFSO hired 20 Meter Readers and cleared settlement-related backlogs in field

investigation, field services and collections activities, and meter re-reads.

 SCS continues to incur overtime to support Power and Water system operations and emergencies.

3. <u>PERFORMANCE / VARIANCE ANALYSIS</u> <u>& YEAR END PROJECTION</u>

- Overtime is expected to continue for CBSS until positions are filled.
- Labor expenses for EEOS will be closer to target by year end.
- ITSD and MSFO will continue to have a variance in regular labor until positions are filled.
- HR did not expend budgeted overtime in the first quarter, due to staffing changes, promotions and efficiencies in completion of projects.
- LRO expects to use more overtime closer to the end of the fiscal year for training and civil service appeal hearings.
- RES requires overtime to support requests for information and documents as well as maintain records. New laws enacted in this past year, such as Accessory Dwelling Units, have caused public requests to increase and require lengthy research.
- SCS expects total overtime hours to be reduced, due to filling vacancies and prioritization; however, dollars may increase due to the current MOU requiring double time pay for overtime.

4. <u>MITIGATION PLAN AND / OR</u> <u>RECOMMENDATIONS</u>

- All CAO organizations will continue to monitor expenditures, prioritize workload as needed, and re-estimate budget, if necessary.
- CBSS, ITS and MSFO are currently working on filling positions to reduce the need for overtime as eligible lists are established.
- SCS will continue to identify ways to provide the required levels of service while minimizing overtime.
- RES is evaluating labor and overtime needs and is exploring alternative solutions to mitigate overtime.

Exceeds Target

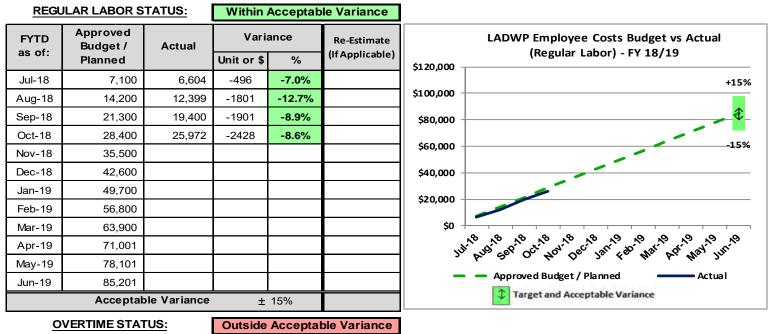
LADWP RATES METRIC – *LADWP EMPLOYEE COST BUDGET VS. ACTUAL* (Chief Operating Officer)

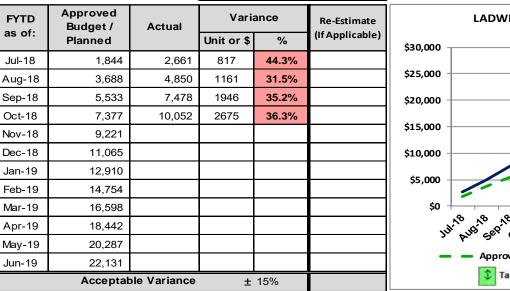
RESPONSIBLE MANAGER: Martin Adams

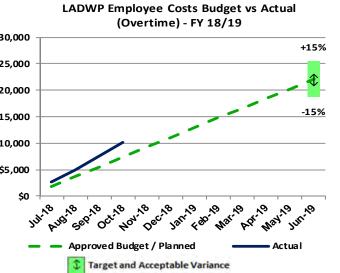
REPORTING PERIOD: October 2018

DEFINITION OF RATES METRIC: LADWP COO System employee costs (including regular labor, overtime, pension and healthcare, excluding daily exempt and Utility Pre-Craft Trainee) budget vs. actual (\$M) **TARGET & ACCEPTABLE VARIANCE (FY 18/19):** +/- 15%

SOURCE OF DATA: Budget Reporting System (BRS) - Rates Metrics Report







Employee Cost Category	Budget	Actual	Variance	Variance %	FY 18/19 Approved
Regular Labor	28,400	25,972	-2,428	-8.6%	85,201
Overtime	7,377	10,052	2,675	36.3%	22,131
Regular Labor + Overtime	35,777	36,024	247	0.7%	107,332
Health Care Allocation	8,026	8,265	238	3.0%	24,079
Retirement & Death Benefit	12,779	12,832	53	0.4%	38,338
Total	56,583	57,121	538	1.0%	169,748

The COO's Organization included:

- a) Facilities Maintenance Operations Support Services (maintenance, operation and repair of LADWP properties which included office buildings, training centers, distributing stations, receiving stations, transmission right-of-ways, power plants, and reservoirs);
- b) Fleet and Aviation Services (fleet maintenance, operations, engineering, and aviation services);
- c) Security Services and Emergency Management (protection/security of LADWP resources, emergency preparedness/response, internal investigations, and the Identification Badges); and
- d) COO's Executive Office (oversight and administration).

2. ACHIEVEMENTS / MILESTONES MET

- Drought tolerant landscapes were installed • at three LADWP facilities, yielding 8,636 square feet of turf removal, 23,060 square feet of drought tolerant landscape applied, and 691,800 gallons of water saved annually.
- Brush clearance for fire protection was • provided throughout the San Fernando Valley and at three remote power plants. A vegetation management program has been implemented to help combat future fire hazards.
- Over 580 new pieces of fleet equipment • were purchased and placed in service since June 2018. This resulted in reduced service/repair costs (aged equipment requires more maintenance) and improved fleet reliability.
- Developed the Southern California Public • Power Mutual Assistance Playbook manual, which is pending SCPPA Board approval.
- Provided monitoring and situational • awareness for local, state and national response events such as Hurricane Michael, Camp Fire, and Woolsey Fire.

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

- Demand for FMOSS, Fleet and Security services has increased above projections.
- The delayed ability to fill vacancies (e.g., lack of eligible lists, internal promotions that create vacancies at lower levels) has contributed to the labor and overtime variances.
- The October 2017 MOU provisions • continue to impact the overtime variance.
- Significant increased demand for services in support of Owens Valley projects (Gorge remediation, Keeler soil management), Power System's transformer replacement project, Human External Cargo transmission line work, and Grant Lake.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

- Fill vacancies as eligible lists are established (overtime will decrease after the new staff is trained and backlogs are reduced).
- Request additional positions (as needed) to handle increased service needs.
- Support the City Personnel Department's • and DWP's Employment Services' efforts to have viable eligible lists available for the critical classes by providing subject matter experts to assist with examinations.
- Use the Utility Pre-Craft Trainee (UPCT) Program to fill vacancies. The program was recently modified to provide a hiring mechanism for entry level non-craft positions such as Custodians and Maintenance Laborers. FMOSS anticipates hiring 30 Custodians and six Maintenance Laborers through the program in 2019.
- Continue to meet with internal customers to • set priorities and better estimate service needs (which will facilitate more accurate planning/staffing).
- Continue to work with Purchasing to reduce • the contract backlog; provide contracts (where possible) that reduce overtime and increase equipment availability; and explore new procurement processes (such as

Exceeds Target Needs Attention

cooperative purchases) that streamline the procurement process.

- Continue to evaluate use of technology to increase security efficiencies (e.g., use of alarms, cameras, electronic access control, and drones).
- Continue to support Fleet's recently implemented pilot program to increase their efficiencies (identify individual replacement schedules, regulatory and alternative fuel requirements, and equipment rentals that require replacement with a purchased vehicle).

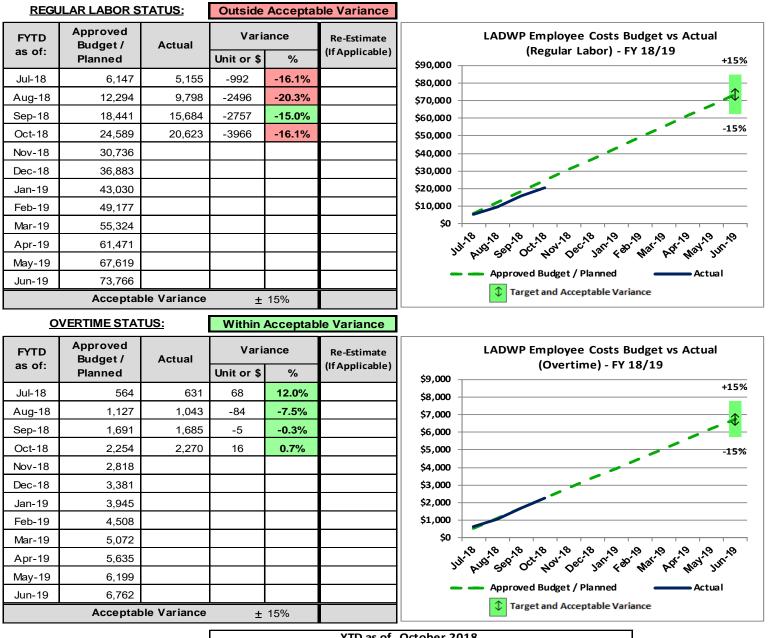
LADWP RATES METRIC – *LADWP EMPLOYEE COST BUDGET VS. ACTUAL* (Customer Service)

RESPONSIBLE MANAGER: Sharon Grove

REPORTING PERIOD: October 2018

DEFINITION OF RATES METRIC: LADWP Customer Service employee costs (including regular labor, overtime, pension and healthcare, excluding daily exempt and Utility Pre-Craft Trainee) budget vs. actual (\$M) **TARGET & ACCEPTABLE VARIANCE (FY 18/19):** +/- 15%

SOURCE OF DATA: Budget Reporting System (BRS) - Rates Metrics Report



Employee Cost Category	Budget	Actual	Variance	Variance %	FY 18/19 Approved
Regular Labor	24,589	20,623	-3,966	-16.1%	73,766
Overtime	2,254	2,270	16	0.7%	6,762
Regular Labor + Overtime	26,843	22,892	-3,950	-14.7%	80,528
Health Care Allocation	6,949	5,928	-1,020	-14.7%	20,846
Retirement & Death Benefit	11,064	9,238	-1,825	-16.5%	33,192
Total	44,855	38,059	-6,796	-15.2%	134,566

 This metric is to assess labor and overtime for Customer Service Division, which includes the Executive Office, Administrative Services Office, Customer Contact Center, Customer Service Centers, Customer Services Support, Employee Development & Training, Energy Efficiency-Mass Market, Key Accounts, Low Income & Multiple Family Dwellings, Revenue & Credit Management, and Water Conservation.

3. <u>PERFORMANCE / VARIANCE ANALYSIS</u> <u>& YEAR END PROJECTION</u>

- Continued underrun in labor is due to staff vacancies.
- CSD is currently in the process of filling 64 regular positions, anticipated to start in December 2018 – February 2019.
- Goal is to fill all current vacancies by fiscal year-end.
- Lack of adequate CSR eligible list has impacted hiring.
- Lengthy process in filling positions from the certification list (at least 2 months turnaround) further delay hiring.

2. <u>ACHIEVEMENTS / MILESTONES MET</u>

- During the months from July 2018 Oct. 2018, 103 positions were filled in CSD resulting in a net increase in occupancy of 23 employees. The positions filled included:
 41 CSRs hired in October 2018
- As of the end of October 2018, CSD still has 43 Customer Services Representative emergency appointments working in the Division.

4. <u>MITIGATION PLAN AND / OR</u> <u>RECOMMENDATIONS</u>

- The division will continue its hiring plan to meet its service goals and to reduce regular labor and overtime discrepancies.
- CSD has worked with Human Resources and City Personnel on the exam process for the Customer Service Representative classification. The CSR exam was opened on Feb. 9, 2018, and over 20,000 applications have been received during filing dates in February. In the first phase of testing, Personnel Department tested about 1300 candidates which resulted in an eligible list of about 120 candidates. In the recent second phase about 1000 candidates were tested and only about 40-50 are expected to be added to the list
- The Sr. Utility Services Specialist bulletin recently opened. A new list is expected next year. Testing for Management Analyst, Senior Admin Clerk and Principal Clerk Utility also in process or recently completed.
- CSD is utilizing limited and emergency appointments to fill up vacancies until eligible lists are established.

Within Acceptable Variance



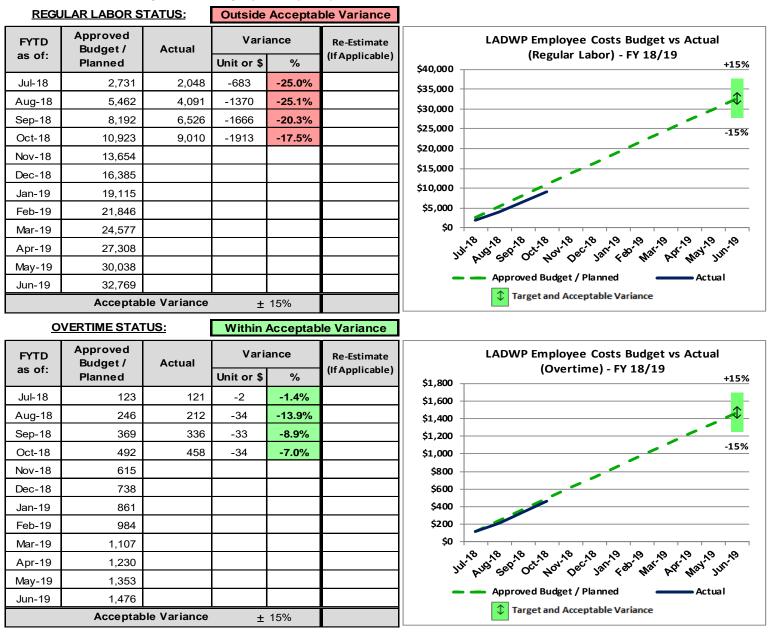
LADWP RATES METRIC – *LADWP EMPLOYEE COST BUDGET VS. ACTUAL* (Financial Services Organization)

RESPONSIBLE MANAGER: Ann Santilli

REPORTING PERIOD: October 2018

DEFINITION OF RATES METRIC: LADWP FSO System employee costs (including regular labor, overtime, pension and healthcare, excluding daily exempt and Utility Pre-Craft Trainee) budget vs. actual (\$M) **TARGET & ACCEPTABLE VARIANCE (FY 18/19):** +/- 15%

SOURCE OF DATA: Budget Reporting System (BRS) - Rates Metrics Report



Employee Cost Category	Budget	Actual	Variance	Variance %	FY 18/19 Approved
Regular Labor	10,923	9,010	-1,913	-17.5%	32,769
Overtime	492	458	-34	-7.0%	1,476
Regular Labor + Overtime	11,415	9,468	-1,947	-17.1%	34,245
Health Care Allocation	3,088	2,912	-176	-5.7%	9,265
Retirement & Death Benefit	4,912	4,701	-211	-4.3%	14,737
Total	19,415	17,081	-2,334	-12.0%	58,246

- This is an analysis of the regular labor and overtime expenditures for the following Divisions in FSO:
 - Org 21 Financial Services Exec Office
 - Org 22 Accounting and Financial Reporting
 - Org 23 Budget, Rates, Fin. Planning, and Fin. System Replacement
 - $\circ \quad \text{Org 25}-\text{Finance and Risk Control}$
 - o Org 26 Internal Audit
 - o Org 28 Corporate Performance

2. ACHIEVEMENTS / MILESTONES MET

• Accounts Payable

- Supervision has been proactive in holding staff accountable by monitoring productivity metrics on a weekly basis.
- Currently have a twelve month discount capture rate of 90%.
- Cashier's Office
 - o Assisted in cash reconciliation effort
 - Met with FSR team for ERP and completed AS-IS documentation

• Financial Systems Replacement (FSR)

- Started documenting Reports Inventory of the financial applications.
- Team attended the two-day Accounting and Finance Show.
- Conducted the review of KPMG's software functional requirements together with SMEs.
- Completed the "As-Is" End-to-End business process documentation and flowcharts for all modules - with the exception of payroll and timekeeping.
- Completed Phase I of the Journal Entry analysis.
- Started Phase II of the Journal Entry analysis.
- Started drafting executive summaries and sign-off packages for the "As Is" End-to-End business process.
- Facilitated Gartner's workshops in reviewing ERP software requirements on finance and payroll modules with participation from SMEs.

- Continue participating in the weekly chaining logic training conducted by IT Payroll.
- Formed task force with HR in reviewing requirements for Compensation Administration.
- Continue health care workshop for active employee health care.
- Continue with Time Matrix review with Payroll Office.
- Conducted eight presentations in August and September during the third round of FSO progress report meetings with participation from the CPMO.
- Participated and presented all modules at the ERP Symposium.
- Reviewed and provided final sign-off on the ERP Program Charter.
- Internal Audit
 - With about a 40 percent vacancy rate during the FY 2017-2018 due to retirement and promotions out, we completed 20 audits, including all mandatory audits.
 - The audits identified 67 findings and recommendations, of which 62 were accepted by management, or 92%.
 - The audits identified and recovered \$1.6 million.
 - o Backfilled some key positions.
- Payroll
 - Implemented New MOU contract for Unrepresented employees with retroactive payments from June 2016 and June 2017.
 - Implemented June 2018 COLA for Unrepresented employees – Bargaining Unit V.
 - Implemented new deduction for women Engineers.
 - Implemented new pay adjustment for Excess Benefit Arrangement - For Retirement Office for Retirees (IRS Regulation).
 - Started preparation for the 10/1/18 COLA's for MEA, IBEW, ACE, and LDA. This will be implemented in October 2018.

Exceeds Target

Needs Attention

 Started preparation for year-end Sick and B-Time payments and the W2 process. Year-end work is very labor intensive.

Rates, Contracts, and Rates Technology

- Along with Power System, worked with MTA to analyze and clarify demand charge application for their operations. Established proposed terms and conditions for possible MTA Agreement.
- 40 eligible customers for special XCD rate were identified to allow opportunity for these large C&I customers to lower their electric rates.
- o Continued working with Key Account Managers to implement Summer Shift program for Summer 2018.
- Supported load curtailment calls for Summer 2018 with the following load reductions: (Mandatory) 7/6/18 - 45 MW; (Voluntary) 7/23/18 - 36 MW; (Mandatory) 7/25/18 - 45 MW; (Voluntary) 8/7/18 - 37.5 MW; (Voluntary) 8/9/18 - 37.3 MW.
- o Continue to support special billing and data collection for up to 40% of our top electric customers through PBS.
- Support associated renewal of special electric contracts (16 - XCD, 1 - XRT, 1 – AMP, 7 - Combo) including new standard agreement for renewables currently under review.
- Completed Rates Consulting Services, and Marginal Cost Study and Benchmarking Services Contracts to support the Interim Water and Power Rates Review. Obtained Board approval on July 24, Energy Climate Change and **Environmental Justice Committee** approval on August 7 and Council approval on August 24.
- o Rates Application Technology and Maintenance RFP evaluation completed to support web-based applications that provide information to LADWP customers on rates and other information.

- Completed Shared Solar Rate Design with rates based upon total cost of service and methodology and presented to Board on 9/25/18.
- Electric rate was issued for Shared Solar Contracts to IT for CCB programming effective January 1, 2019 thru December 31, 2019.
- Power Quarterly Factors and Water Biannual Factors were issued to IT for CCB programming effective January 1, 2019.
- o Updated Rate Calculation worksheets for bill testing to reflect Oct 1 quarterly rate factor changes.
- Volume tested CCB with the October quarterly rate factors before October 1 go live.
- o Completed PowerPoint presentations for explanation of proration in Electric and Water Bill Calculation method in CCB.
- Completed update of Rates Annual Report (Briefing Book).
- Completed electric vehicle (EV) report for CARB containing total consumption, average daily use, number of EV customers.
- o Completed Water Loss Task Force containing prorated FY18 consumption by class and by meter size, total number of monthly bills and number of estimated bills, list of active meters and random selection for meter testing.
- Completed MWD turf data containing water consumption for a specific list of customers participating in turf data study from 2000 to present.
- Rate factor for the Water Replenishment District of Southern California effective January 1, 2019 thru June 30, 2019 was issued to IT for CCB programming.
- o Collected information from LADWP systems and divisions; provided Water and Power analyses to support draft reports for the Water and Power Interim Rate Review and Cost of Service Review. Draft reports are currently under review.

Exceeds Target Needs Attention

o Completed PowerPoint presentation on **Experimental Contract Demand Service** and presented to Key Accounts managers.

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

Accounts Payable

- o Currently we have 3 new vacancies 2 SAC's, 1 PCU-B and we have 2 employees on extended leaves.
- Will offer overtime to staff on as needed basis to keep invoice cycle time down and keep the discount capture rate in the 90% range.

Cashier's Office

- SUA-C position vacant from July through October resulting in increased overtime to meet daily operational needs.
- o UA-B position vacant until end of August. Overtime needed for office operations.

Financial Systems Replacement

 Overall actual regular and overtime labor are below budget due to the delayed RFP process for the ERP software and system integrator.

Internal Audit

• Actual labor is lower than budgeted labor due to 7 vacant positions resulting from retirement and promotions out. Recently we have backfilled 3 positions. We plan to backfill the remaining 4 positions by the end of the fiscal year

Payroll

- Overtime has increased this fiscal year due to:
 - -Additional overtime has been needed for 3 new projects: New **Deduction for Women Engineers** completed and implemented, Excess Benefit Arrangement - pay adjustment completed and implemented, and new employee deduction related to JSI/JTI .43% of hours worked programming and testing has been completed by

10/1/2018. This is ready for the first deduction to be taken PPE 10/28/2018.

Additional overtime may be needed for Securities upcoming contract, as well as 10/1/2018 COLA for IBEW, MEA, ACE, and LDA.

Rates, Contracts, and Rates Technology

o Actual labor is lower than budgeted due to two vacant positions which resulted in an increase in overtime. Both positions were filled as of September 3.

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

Accounts Payable

o Continue training new hires; Backfill two SAC's positions and One PCU-B

Cashier's Office

 Work towards training new staff and stabilizing work force in Cashier. SUA-C position vacant. UA-B position filled 8/20/18.

Financial Systems Replacement

- o Actual labor expense should be closely aligned with budget going forward since most vacancies have been filled. Overtime labor is dependent on the actual release of ERP RFPs. However, the Payroll team has been working overtime to capture the timekeeping rules.
- **Internal Audit**
 - o Continue training new hires and work on backfilling the vacant positions.
- Payroll
 - Work with staff to cover duties of two new vacancies and do as much advance planning for all year-end responsibilities. Extra overtime will most likely be needed.
- Rates, Contracts, and Rates Technology
 - o The labor and overtime will be closely aligned with budget since the two vacant positions were filled.
 - The labor and overtime may be impacted by the Water and Power Rate Review activities.

LADWP RATES METRIC – *LADWP EMPLOYEE COST BUDGET VS. ACTUAL* (Commission Office)

RESPONSIBLE MANAGER: Barbara Moschos

REPORTING PERIOD: October 2018

DEFINITION OF RATES METRIC: LADWP Commission Office employee costs (including regular labor, overtime, pension and healthcare, excluding daily exempt and Utility Pre-Craft Trainee) budget vs. actual (\$M) **TARGET & ACCEPTABLE VARIANCE (FY 18/19):** +/- 15%

SOURCE OF DATA: Budget Reporting System (BRS) - Rates Metrics Report

<u>REGU</u>	LAR LABOR S	TATUS:	Outside	Accepta	ble Variance		
FYTD	Approved Budget /	Actual	Vari	ance	Re-Estimate		LADWP Employee Costs Budget (Regular Labor) - FY 18/1
as of:	Planned		Unit or \$	%	(If Applicable)	\$450 -	(Regular Labor) - Ff 18/1
Jul-18	30	32	2	5.6%		\$400 -	
Aug-18	61	62	1	1.8%		\$350 -	
Sep-18	91	113	22	24.0%		\$300 -	
Oct-18	122	147	25	20.7%		\$250 -	
Nov-18	152					\$200 -	
Dec-18	183					\$150 -	
Jan-19	213					\$100 -	
-eb-19	244					\$50 -	
Mar-19	274					\$0 -	
Apr-19	305					71)	Proj. 280, 00, 404, 060, 281, 489, 419, 4
√ay-19	335					5	
Jun-19	366					_	- Approved Budget / Planned -
	Acceptab	ole Variance	±	15%			Target and Acceptable Variance
<u>0\</u>	VERTIME STAT	US:	E	xceeds T			
				ACCEUS I	arget		
FYTD	Approved Budget /	Actual		ance	Re-Estimate		LADWP Employee Costs Budget v
FYTD as of:				ance		\$45 –	LADWP Employee Costs Budget v (Overtime) - FY 18/19
	Budget /		Vari	ance	Re-Estimate	\$45 - \$40 -	• • •
as of:	Budget / Planned	Actual	Vari Unit or \$	ance %	Re-Estimate		• • •
as of: Jul-18	Budget / Planned 3	Actual 2	Vari Unit or \$ -1	ance % -38.3%	Re-Estimate	\$40 -	• • •
as of: Jul-18 Aug-18	Budget / Planned 3 6	Actual 2 3	Vari Unit or \$ -1 -3	ance % -38.3% -48.6%	Re-Estimate	\$40 - \$35 -	• • •
as of: Jul-18 Aug-18 Sep-18	Budget / Planned 3 6 9	Actual 2 3 7	Vari Unit or \$ -1 -3 -2	ance % -38.3% -48.6% -17.7%	Re-Estimate	\$40 - \$35 - \$30 -	• • •
as of: Jul-18 Aug-18 Sep-18 Oct-18	Budget / Planned 3 6 9 12	Actual 2 3 7	Vari Unit or \$ -1 -3 -2	ance % -38.3% -48.6% -17.7%	Re-Estimate	\$40 - \$35 - \$30 - \$25 -	• • •
Jul-18 Aug-18 Sep-18 Oct-18 Nov-18	Budget / Planned 3 6 9 12 15	Actual 2 3 7	Vari Unit or \$ -1 -3 -2	ance % -38.3% -48.6% -17.7%	Re-Estimate	\$40 - \$35 - \$30 - \$25 - \$20 -	• • •
as of: Jul-18 Aug-18 Sep-18 Oct-18 Nov-18 Dec-18	Budget / Planned 3 6 9 12 15 18	Actual 2 3 7	Vari Unit or \$ -1 -3 -2	ance % -38.3% -48.6% -17.7%	Re-Estimate	\$40 - \$35 - \$30 - \$25 - \$20 - \$15 - \$10 - \$5 -	• • • •
Jul-18 Jul-18 Aug-18 Sep-18 Oct-18 Nov-18 Dec-18 Jan-19	Budget / Planned 3 6 9 12 15 18 20	Actual 2 3 7	Vari Unit or \$ -1 -3 -2	ance % -38.3% -48.6% -17.7%	Re-Estimate	\$40 - \$35 - \$30 - \$25 - \$20 - \$15 - \$10 - \$5 - \$0 -	(Overtime) - FY 18/19
Jul-18 Jul-18 Aug-18 Sep-18 Oct-18 Nov-18 Dec-18 Jan-19 Feb-19	Budget / Planned 3 6 9 12 15 18 20 23	Actual 2 3 7	Vari Unit or \$ -1 -3 -2	ance % -38.3% -48.6% -17.7%	Re-Estimate	\$40 - \$35 - \$30 - \$25 - \$20 - \$15 - \$10 - \$5 - \$0 -	(Overtime) - FY 18/19
as of: Jul-18 Aug-18 Sep-18 Oct-18 Vov-18 Dec-18 Jan-19 Feb-19 Mar-19	Budget / Planned 3 6 9 12 15 18 20 23 23 26	Actual 2 3 7	Vari Unit or \$ -1 -3 -2	ance % -38.3% -48.6% -17.7%	Re-Estimate	\$40 - \$35 - \$30 - \$25 - \$20 - \$15 - \$10 - \$5 -	(Overtime) - FY 18/19

Acceptable Variance

± 15%



Employee Cost Category	Budget	Actual	Variance	Variance %	FY 18/19 Approved	
Regular Labor	122	147	25	20.7%	366	
Overtime	12	9	-2	-20.3%	35	
Regular Labor + Overtime	134	157	23	17.1%	401	
Health Care Allocation	34	44	10	27.8%	103	
Retirement & Death Benefit	55	68	13	24.5%	165	
Total	223	269	46	20.6%	669	

The Commission Office provides support to the LADWP Board of Commissioners and is responsible for the Commission agenda, meetings, and after meeting document processing. The overall variance for fiscal-year-to-date, July 2018 through October 2018, is a combined 17 percent overrun for total budgeted dollars for labor and overtime (labor at 21 percent overrun and overtime at 20 percent underrun).

2. ACHIEVEMENTS / MILESTONES MET

Timely processing of agendas, resolutions, back up documents, and documents for Mayor and Council Approvals.

3. <u>PERFORMANCE / VARIANCE ANALYSIS</u> <u>& YEAR END PROJECTION</u>

Anticipate expenditures will be in line with budget by end of fiscal year.

4. <u>MITIGATION PLAN AND / OR</u> <u>RECOMMENDATIONS</u>

Commission Office will monitor labor and overtime numbers.

LADWP RATES METRIC - LADWP EMPLOYEE COST BUDGET VS. ACTUAL (Office of City Attorney) MFave Strong REPORTING PERIOD: October 2018

RESPONSIBLE MANAGER: Joseph Brajevich/Faye Strong

DEFINITION OF RATES METRIC: LADWP Office of City Attorney employee costs (including regular labor, overtime, pension and healthcare, excluding daily exempt and Utility Pre-Craft Trainee) budget vs. actual (\$M) TARGET & ACCEPTABLE VARIANCE (FY 18/19): +/- 15%

SOURCE OF DATA: Budget Reporting System (BRS) - Rates Metrics Report

REGL	JLAR LABOR S	TATUS:	Within	Acceptab	ble Variance	
FYTD	FYTD Approved as of: Budget /		Varia	ance	Re-Estimate (If Applicable)	LADWP Employee Costs Budget vs Actual (Regular Labor) - FY 18/19
as 01.	Planned		Unit or \$	%	(ITApplicable)	\$3,000 +
Jul-18	199	206	7	3.4%		
Aug-18	398	405	8	1.9%		\$2,500
Sep-18	596	596	-1	-0.1%		\$2,000
Oct-18	795	836	41	5.1%		
Nov-18	994					\$1,500
Dec-18	1,193					\$1,000
Jan-19	1,391					\$500
Feb-19	1,590					
Mar-19	1,789					\$0 + · · · · · · · · · · · · · · · · · ·
Apr-19	1,988					20 10 10 10 10 10 10 10 10 10 10 10 10 10
May-19	2,187					
Jun-19	2,385					Approved Budget / Planned Actual
	Acceptat	ole Variance	±	15%		Target and Acceptable Variance
<u>o</u>	VERTIME STAT	<u>rus:</u>	E	xceeds T	Farget	
FYTD	Budget / Actual		Variance		Re-Estimate	LADWP Employee Costs Budget vs Actual (Overtime) - FY 18/19
as of:	Planned		Unit or \$	%	(If Applicable)	(Overtime) - F1 18/19 \$140
Jul-18	9	4	-6	-61.8%		\$120
Aug-18	19	5	-13	-71.4%		
Sep-18	28	6	-23	-79.9%		\$100
Oct-18	38	6	-32	-84.6%		\$80
Nov-18	47					\$60
Dec-18	57					\$40
Jan-19	66					
Feb-19	75					\$20
Mar-19	85					\$0 +
Apr-19	94					791, Prog. 286, Oct. 400, Dec. 724, 689, 492, 424, 493, 72,
May-19	104					
Jun-19	113					Approved Budget / Planned Actual

Acceptable Variance

± 15%

t Target and Acceptable Variance

Employee Cost Category	Budget	Actual	Variance	Variance %	FY 18/19 Approved	
Regular Labor	795	836	41	5.1%	2,385	
Overtime	38	6	-32	-84.6%	113	
Regular Labor + Overtime	833	842	9	1.1%	2,499	
Health Care Allocation	225	245	20	8.8%	674	
Retirement & Death Benefit	358	383	25	7.0%	1,073	
Total	1,415	1,469	54	3.8%	4,246	

Office of the City Attorney provides legal support and counsel to the Los Angeles Department of Water and Power (LADWP).

The net overall variance for fiscal-year-to-date, July 2018 through October 2018, is a combined 1 percent overrun for total budgeted dollars for labor and overtime (labor at 5 percent overrun and overtime at 85 percent underrun).

2. ACHIEVEMENTS / MILESTONES MET

Providing legal advice and guidance to the LADWP, Board, and employees in civil litigation and transactions.

3. <u>PERFORMANCE / VARIANCE ANALYSIS</u> <u>& YEAR END PROJECTION</u>

Overtime has been reduced due to the hiring of essential staff and succession planning. More overtime is anticipated later in the year as more litigation cases come under review.

Overrun in labor is expected through the rest of the fiscal year.

4. <u>MITIGATION PLAN AND / OR</u> <u>RECOMMENDATIONS</u>

The City Attorney's Office will monitor expenditures and re-estimate appropriately for labor and overtime.

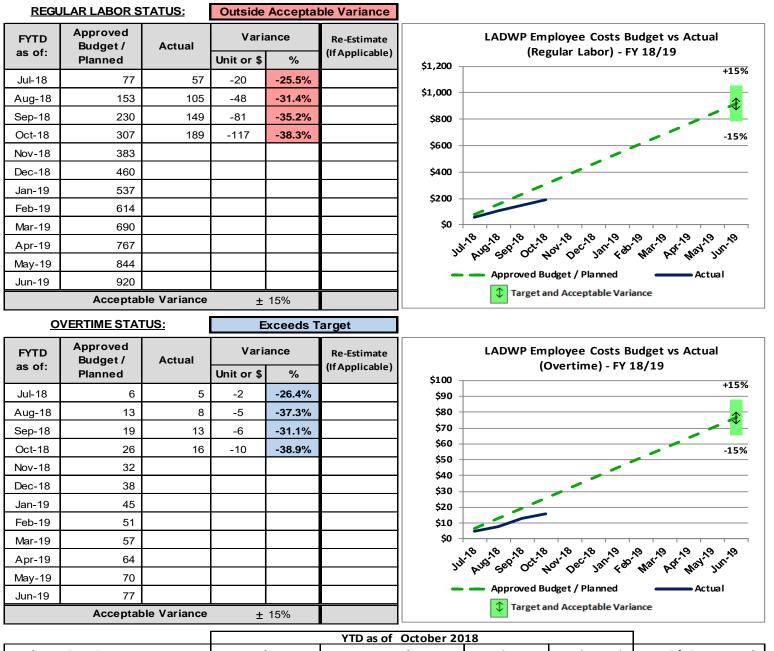
LADWP RATES METRIC – *LADWP EMPLOYEE COST BUDGET VS. ACTUAL* (General Manager's Office)

RESPONSIBLE MANAGER: David H. Wright/Faye Strong

REPORTING PERIOD: October 2018

DEFINITION OF RATES METRIC: LADWP General Manager's Office employee costs (including regular labor, overtime, pension and healthcare, excluding daily exempt and Utility Pre-Craft Trainee) budget vs. actual (\$M) **TARGET & ACCEPTABLE VARIANCE (FY 18/19):** +/- 15%

SOURCE OF DATA: Budget Reporting System (BRS) - Rates Metrics Report



		YTD as of October 20	18		
Employee Cost Category	Budget	Actual	Variance	Variance %	FY 18/19 Approved
Regular Labor	307	189	-117	-38.3%	920
Overtime	26	16	-10	-38.9%	77
Regular Labor + Overtime	332	205	-127	-38.3%	997
Health Care Allocation	87	96	9	10.2%	260
Retirement & Death Benefit	138	149	11	7.8%	414
Total	557	449	-108	-19.3%	1,671

The General Manager's Office provides support for General Manager and Department operations. The Office is responsible for: processing items for LADWP Board meeting agendas; working with Power, Water, and Joint Systems; and providing guidance on procedures and policies

The overall variance for fiscal-year-to-date, July 2018 through October 2018, is 38 percent underrun for total budgeted dollars for labor and overtime (labor at 38 percent underrun and overtime at 38 percent underrun).

2. ACHIEVEMENTS / MILESTONES MET

Successful coordination and implementation of projects and assignments between LADWP systems.

3. <u>PERFORMANCE / VARIANCE ANALYSIS</u> <u>& YEAR END PROJECTION</u>

Regular labor and overtime are underrun due to current vacancies.

4. <u>MITIGATION PLAN AND / OR</u> <u>RECOMMENDATIONS</u>

Fill necessary vacancies to reduce underruns in regular labor and continue to monitor expenditures to budget more accurately for future years.

LADWP RATES METRIC – *LADWP EMPLOYEE COST BUDGET VS. ACTUAL* (Public Affairs)

RESPONSIBLE MANAGER: Joseph Ramallo

REPORTING PERIOD: October 2018

DEFINITION OF RATES METRIC: LADWP Public Affairs employee costs (including regular labor, overtime, pension and healthcare, excluding daily exempt and Utility Pre-Craft Trainee) budget vs. actual (\$M) **TARGET & ACCEPTABLE VARIANCE (FY 18/19):** +/- 15%

SOURCE OF DATA: Budget Reporting System (BRS) - Rates Metrics Report

Statute and a statute of the	LAR LABOR S	14103:	within	Acceptab	ole Variance
FYTD as of:	Approved Budget /	Actual	Variance		Re-Estimate
as or.	Planned		Unit or \$	%	(If Applicable)
Jul-18	577	605	28	4.9%	
Aug-18	1,154	1,256	102	8.9%	
Sep-18	1,731	1,864	132	7.6%	
Oct-18	2,308	2,465	157	6.8%	
Nov-18	2,885				
Dec-18	3,462			1	
Jan-19	4,039				
Feb-19	4,616				
Mar-19	5,194				
Apr-19	5,771				
May-19	6,348				
Jun-19	6,925	Cherry Con 1	[
	Acceptab	le Variance	encolo in ±	15%	
		Social States of States and			A CONTRACTOR OF A CONTRACTOR OF A CONTRACT O
0	/ERTIME STAT	US:	Outside	Accepta	ble Variance
	Approved	US:	E. C.		ble Variance
FYTD	Approved Budget /	US: Actual	E. C.	iance	Re-Estimate
	Approved		E. C.	iance	
FYTD	Approved Budget /		Var	iance	Re-Estimate
FYTD as of:	Approved Budget / Planned	Actual	Var Unit or \$	iance %	Re-Estimate
FYTD as of: Jul-18	Approved Budget / Planned 24	Actual 48	Var Unit or \$ 24	iance % 101.8%	Re-Estimate
FYTD as of: Jul-18 Aug-18	Approved Budget / Planned 24 47	Actual 48 100	Var Unit or \$ 24 53	iance % 101.8% 111.3%	Re-Estimate
FYTD as of:Jul-18Aug-18Sep-18	Approved Budget / Planned 24 47 71	Actual 48 100 179	Var Unit or \$ 24 53 108	iance % 101.8% 111.3% 151.7%	Re-Estimate
FYTD as of: Jul-18 Aug-18 Sep-18 Oct-18	Approved Budget / Planned 24 47 71 95	Actual 48 100 179	Var Unit or \$ 24 53 108	iance % 101.8% 111.3% 151.7%	Re-Estimate
FYTD as of: Jul-18 Aug-18 Sep-18 Oct-18 Nov-18	Approved Budget / Planned 24 47 71 95 118	Actual 48 100 179	Var Unit or \$ 24 53 108	iance % 101.8% 111.3% 151.7%	Re-Estimate
FYTD as of: Jul-18 Aug-18 Sep-18 Oct-18 Nov-18 Dec-18	Approved Budget / Planned 24 47 71 95 118 142	Actual 48 100 179	Var Unit or \$ 24 53 108	iance % 101.8% 111.3% 151.7%	Re-Estimate
FYTD as of: Jul-18 Aug-18 Sep-18 Oct-18 Nov-18 Dec-18 Jan-19	Approved Budget / Planned 24 47 71 95 118 142 166	Actual 48 100 179	Var Unit or \$ 24 53 108	iance % 101.8% 111.3% 151.7%	Re-Estimate
FYTD as of: Jul-18 Aug-18 Sep-18 Oct-18 Nov-18 Dec-18 Jan-19 Feb-19	Approved Budget / Planned 24 47 71 95 118 142 166 189	Actual 48 100 179	Var Unit or \$ 24 53 108	iance % 101.8% 111.3% 151.7%	Re-Estimate
FYTD as of: Jul-18 Aug-18 Sep-18 Oct-18 Nov-18 Dec-18 Jan-19 Feb-19 Mar-19	Approved Budget / Planned 24 47 71 95 118 142 166 189 213	Actual 48 100 179	Var Unit or \$ 24 53 108	iance % 101.8% 111.3% 151.7%	Re-Estimate
FYTD as of: Jul-18 Aug-18 Sep-18 Oct-18 Nov-18 Dec-18 Jan-19 Feb-19 Mar-19 Apr-19	Approved Budget / Planned 24 47 71 95 118 142 166 189 213 237	Actual 48 100 179	Var Unit or \$ 24 53 108	iance % 101.8% 111.3% 151.7%	Re-Estimate

Employee Cost Category	Budget	Actual	Variance	Variance %	FY 18/19 Approved
Regular Labor	2,308	2,465	157	6.8%	6,925
Overtime	95	252	157	165.8%	284
Regular Labor + Overtime	2,403	2,717	314	13.1%	7,209
Health Care Allocation	652	722	70	10.7%	1,957
Retirement & Death Benefit	1,039	1,131	92	8.9%	3,116
Total	4,094	4,569	475	11.6%	12,281

Public Affairs, currently known as Communications, Media and Community Affairs (CMCA) is comprised of the following minor orgs:

06100 Community Affairs 06200 Communications 06400 Corporate Communications 06500 Media Relations

2. ACHIEVEMENTS / MILESTONES MET

Some achievements for the Community Affairs group during this reporting period include:

• **Community Affairs**: 170 community-based activities (106 community events, 51 community meetings, 3 Owens Valley tours)

3. <u>PERFORMANCE / VARIANCE ANALYSIS</u> <u>& YEAR END PROJECTION</u>

The overtime captured in this report is primarily worked by employees in minor org 06100, Community Affairs or contributing to this org. The activities performed by this group involve the following events which occur after-hours, on weekends, and at various times during the day; this requires the use of overtime:

- Display Shop Set-up and dismantling of exhibits, events and briefings for department and community sponsored programs
- Speakers Bureau participation Trained employees are on hand at community events to provide customers and stakeholders with important information about issues impacting water and power operations, conservation, policies and customer service
- Tour guide for out-of-basin tours

The activities, described above, are in support of the community, Neighborhood Councils and the local electorate base. So the timing of events does not meet the normal working hours of the staff. Another consideration is that overtime compensation for Display Shop employees is governed by Article 9.1(e) (a) of the MOU for Bargaining Unit 8 – Operating, Maintenance and Service. A recent change to this article has also increased overtime expenditures.

Although the year end projection for approved budget dollars for overtime will cover a portion of the actual, it will not meet the actual. This is due to the general instruction from the budget office that non critical classes and work should be budgeted at 10% of the org's regular labor budget.

4. <u>MITIGATION PLAN AND / OR</u> <u>RECOMMENDATIONS</u>

The overtime variance will be partially mitigated with additional hiring, as follows:

• Community Affairs – 2 Principal Public Relations Representatives, 1 Sr. Storekeeper and 1 Storekeeper

In addition to hiring, staff will continue to investigate areas to be more efficient and effective. For example, efforts are now underway to streamline exhibits which would require one employee as opposed to two in some cases. Staff will also continue to evaluate the need to be at each event requested. The threshold for acceptance of meetings is being reconsidered as a means to potentially eliminate overtime impact.

However, this work will continue as it supports transparency, collaboration with the community and it is a high priority for both the General Manager and the Board of Water and Power Commissioners. It is therefore recommended that special consideration be given for work that is not controlled by internal activities and which typically takes place after normal operating hours with no ability by staff to dictate. While

the staff and work cannot be considered critical, it is generated by the need to communicate with the community about critical projects for the Department. Special consideration would allow for more accurate budgeting in the area of overtime, thus avoiding variances.

RATES METRIC – *LADWP EMPLOYEE COST BUDGET VS. ACTUAL* Naglid (Office of Safety)

RESPONSIBLE MANAGER: Frank Naglich

REPORTING PERIOD: October 2018

+15%

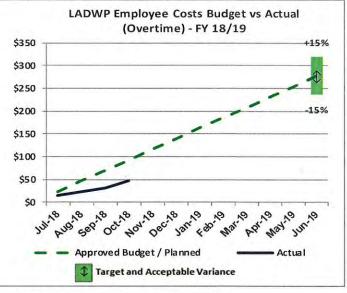
-15%

DEFINITION OF RATES METRIC: LADWP Office of Safety employee costs (including regular labor, overtime, pension and healthcare, excluding daily exempt and Utility Pre-Craft Trainee) budget vs. actual (\$M) TARGET & ACCEPTABLE VARIANCE (FY 18/19): +/- 15%

SOURCE OF DATA: Budget Reporting System (BRS) - Rates Metrics Report

		ole Variance	Acceptal	Outside	TATUS:	LAR LABOR ST	REGU
LADWP Employee Costs Budget vs Actual		Re-Estimate	ince	Varia	Actual	Approved Budget /	FYTD
(Regular Labor) - FY 18/19	\$7,000	(If Applicable)	%	Unit or \$		Planned	as of:
			-41.2%	-182	259	440	Jul-18
	\$6,000 -		-39.3%	-346	534	881	Aug-18
	\$5,000		-41.4%	-547	773	1,321	Sep-18
	\$4,000 -		-43.0%	-758	1,003	1,761	Oct-18
	\$3,000 -			1.1.1.1		2,201	Nov-18
						2,642	Dec-18
	\$2,000 -					3,082	an-19
	\$1,000 -					3,522	Feb-19
· · · · · · · · · · ·	\$0 +					3,963	Mar-19
40 16 200 00 10 10 00 10 10 10 10 10 10 10 10 1	Juli					4,403	Apr-19
	3					4,843	May-19
- Approved Budget / Planned Actua	-				L	5,284	Jun-19
Target and Acceptable Variance		and the second of the	15%	±	le Variance	Acceptabl	
		arget	T sheen	E		FRTIME STAT	01

0	VERTIMESTAT	05:	E	xceeds T	arget	
FYTD	Approved Budget /			ance	Re-Estimate	
as of:	Planned		Unit or \$	%	(If Applicable)	
Jul-18	23	15	-8	-33.5%		
Aug-18	46	24	-22	-48.2%		
Sep-18	70	32	-38	-54.5%		
Oct-18	93	47	-46	-49.2%		
Nov-18	116					
Dec-18	139					
Jan-19	162		1	1		
Feb-19	185					
Mar-19	209					
Apr-19	232					
May-19	255					
Jun-19	278					
1. 1. 1. 1. 1.	Acceptab	le Variance	±	15%		



Employee Cost Category	Budget	Actual	Variance	Variance %	FY 18/19 Approved
Regular Labor	1,761	1,003	-758	-43.0%	5,284
Overtime	93	47	-46	-49.2%	278
Regular Labor + Overtime	1,854	1,050	-804	-43.4%	5,562
Health Care Allocation	498	321	-177	-35.5%	1,493
Retirement & Death Benefit	792	500	-293	-36.9%	2,377
Total	3,144	1,871	-1,273	-40.5%	9,432

1. BACKGROUND / PURPOSE

The Labor and Overtime data is for the following minor organizations in Org 69:

Org 69111 Office of Safety Exec Ofc & Admin Org 69100 Corporate Health and Safety Org 69200 Industrial Hygiene Org 69300 Safety Engineering

For Fiscal Year 18-19, the Office of Safety gained nine (9) funded substitute positions; increasing the total number of positions from 32 to 41.

2. ACHIEVEMENTS / MILESTONES MET

To fill the new vacant funded positions, the Office of Safety submitted examination requests to the Personnel Department for the Industrial Hygienist, Senior Industrial Hygienist and Safety Engineer classifications in the 17-18 FY. Interviews and hiring have been completed for two Senior Industrial Hygienist positions and candidates were selected in November. The Safety Engineer and Industrial Hygienist interviews are scheduled for December 2018.

3. <u>PERFORMANCE / VARIANCE ANALYSIS</u> <u>& YEAR END PROJECTION</u>

The Office of Safety currently has 14 vacancies as of December 2018, resulting in the -43.4% variance to labor and overtime costs; budget vs actual. Although the Office of Safety has established lists to fill these vacancies, we have space limitations in the current facilities at both the Truesdale and Central Service Yards. It is anticipated that all vacancies will be filled by March/April of 2019.

4. <u>MITIGATION PLAN AND / OR</u> <u>RECOMMENDATIONS</u>

The Office of Safety is working on a modular facility at the Truesdale Yard and will be relocating all staff to these facilities. The new modular facilities will have enough space for all the current vacancies and anticipated hiring. Expected move date is March 2019.

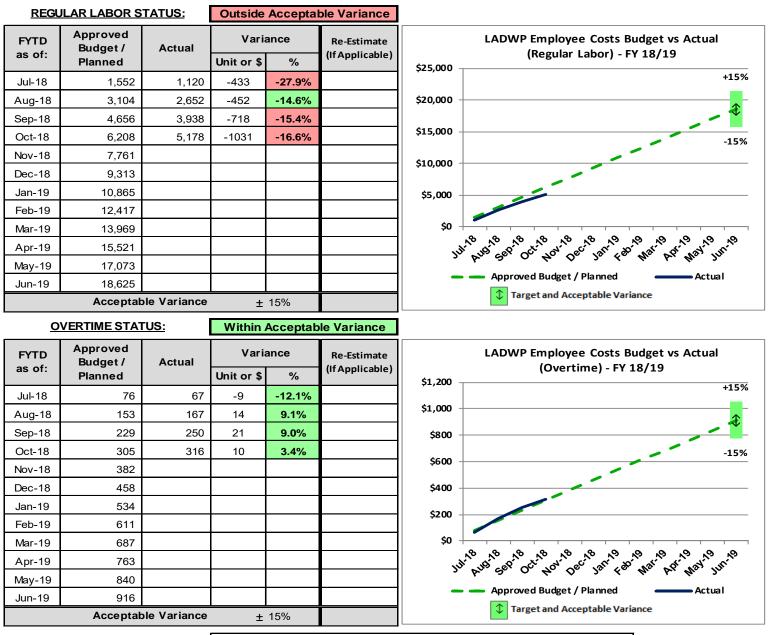
LADWP RATES METRIC – *LADWP EMPLOYEE COST BUDGET VS. ACTUAL* (Office of Sustainability)

RESPONSIBLE MANAGER: Nancy Sutley

REPORTING PERIOD: October 2018

DEFINITION OF RATES METRIC: LADWP Office of Sustainability employee costs (including regular labor, overtime, pension and healthcare, excluding daily exempt and Utility Pre-Craft Trainee) budget vs. actual (\$M) **TARGET & ACCEPTABLE VARIANCE (FY 18/19):** +/- 15%

SOURCE OF DATA: Budget Reporting System (BRS) - Rates Metrics Report



		YTD as of October 2018						
Employee Cost Category	Budget	Actual	Variance	Variance %	FY 18/19 Approved			
Regular Labor	6,208	5,178	-1,031	-16.6%	18,625			
Overtime	305	316	10	3.4%	916			
Regular Labor + Overtime	6,514	5,494	-1,020	-15.7%	19,541			
Health Care Allocation	1,754	1,768	14	0.8%	5,263			
Retirement & Death Benefit	2,793	2,786	-7	-0.3%	8,378			
Total	11,061	10,048	-1,013	-9.2%	33,182			

1. BACKGROUND / PURPOSE

The Office of Sustainability has the following Minor Orgs: Org 11200 Efficiency Solutions is tasked with ensuring Los Angeles remains focused on meeting energy efficiency goals; and managing direct install programs, rebates, and incentives to promote savings for all LADWP customers. Orgs 11100, 11101, 11102, 11103, 11104, 11105, 11150 Environmental Affairs has oversight on compliance with environmental regulations and laws, guidance on the California Environmental Quality Act requirements and promoting sustainable operations for LADWP. Org 11000 is the Executive Office and is responsible for overall sustainability programs and policies for the Department

3. <u>PERFORMANCE / VARIANCE ANALYSIS</u> <u>& YEAR END PROJECTION</u>

Regular Labor has been under expended by 16.6% of the labor budget, as of October 2018 as we continue to fill up Utility Services Specialist (USS) vacancies, backfills for retirements and transfers.

Overtime has is over expended by 3.4% of the overtime budget due to vacancies. Overtime was required to ensure customer expectations are met for program turn-around time. Total OT over expenditure is offset by the under expenditure in Regular Labor.

4. <u>MITIGATION PLAN AND / OR</u> <u>RECOMMENDATIONS</u>

With the establishment of the Utility Services Specialist list, USS positions have been filled and will continue to be filled in the next 2 months.

2. ACHIEVEMENTS / MILESTONES MET

The Office of Sustainability continues to work towards achieving the Department's 15% energy efficiency goal by 2020. Environmental Affairs also continues to ensure that LADWP remains in compliance with state environmental mandates and goals that incorporate a transparent and rigorous data performance analysis on GHG emissions and sustainable metrics into the day to day operations of LADWP.

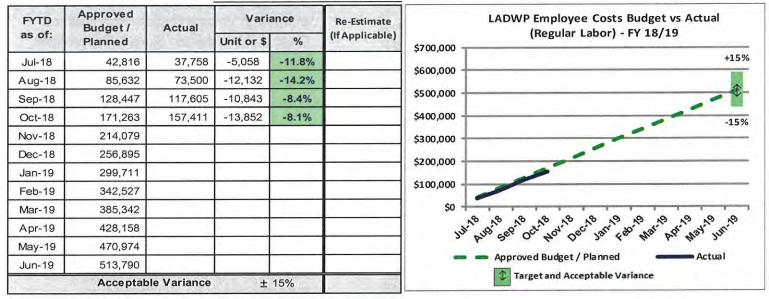
LADWP RATES METRIC - LADWP EMPLOYEE COST BUDGET VS. ACTUAL

RESPONSIBLE MANAGER: Reiko Kerr/Andrew Kendall/Ken Chang

REPORTING PERIOD: October 2018

DEFINITION OF RATES METRIC: LADWP Power System employee costs (including regular labor, overtime, pension and healthcare, excluding daily exempt and Utility Pre-Craft Trainee) budget vs. actual (\$M) **TARGET & ACCEPTABLE VARIANCE (FY 18/19):** +/- 15%

SOURCE OF DATA: Budget Reporting System (BRS) - Rates Metrics Report



OVERTIME STATUS:

Outside Acceptable Variance

FYTD	Approved Budget /	Actual	Varia	ince	Re-Estimate	LADWP Employee Costs Budget vs Actu
as of:	Planned		Unit or \$	%	(If Applicable)	(Overtime) - FY 18/19 \$180,000
Jul-18	11,592	16,922	5,330	46.0%		\$160,000
Aug-18	23,184	28,880	5,696	24.6%		\$140,000
Sep-18	34,776	44,745	9,969	28.7%		\$120,000 -
Oct-18	46,368	60,406	14,038	30.3%		\$100,000
Nov-18	57,960					\$80,000
Dec-18	69,551		·			\$60,000
Jan-19	81,143					\$40,000
Feb-19	92,735				-	\$20,000
Mar-19	104,327					\$0 +
Apr-19	115,919					191, 8 18 18 00, 10 10 10 10 10 10 10 10 10 10 10 10 10
May-19	127,511					
Jun-19	139,103					- Approved Budget / Planned Acti
	Acceptab	le Variance	±	15%		Target and Acceptable Variance

Employee Cost Category	Budget	Actual	Variance	Variance %	FY 18/19 Approved
Regular Labor	171,263	157,411	-13,852	-8%	513,790
Overtime	46,368	60,406	14,038	30%	139,103
Regular Labor + Overtime	217,631	217,817	186	0%	652,893
Health Care Allocation	48,373	46,111	-2,262	-5%	145,118
Retirement & Death Benefit	77,002	72,026	-4,976	-6%	231,007
Total	343,006	335,954	-7,052	-2.1%	1,029,018

1. BACKGROUND / PURPOSE

 Power System comprises nine major organizations with a total of 4,820 approved positions (4,762 APR and 58 Sub Funded):

Division	Apprvd
Power Executive (PEX)	62
Power New Business Development and	1
Technology Application (PNBDTA)	215
Power Supply Operations (PSO)	916
Power External Energy Resources (PEER); formerly Power Fuel and Purchase	69
Power Transmission & Distribution (PTD)	1,564
Power Construction & Maintenance (PCM)	1,323
Power Planning, Development & Engineering (PPDED); merged Power Planning and Development Division and Power Engineering Division	597
Power Safety & Training (PST)	74
Total	4,820

Past Actuals	FY 15/16	FY 16/17	FY 17/18
Labor	\$424,608	\$432,703	\$462,622
OT	\$129,666	\$135,536	\$156,393

- LOA mandated overtime contributes to the overtime variance.
- New MOU implemented October 1, 2017, resulted in additional double overtime for certain IBEW Local 18 represented units.

2. ACHIEVEMENTS / MILESTONES MET

 Through October 2018, Power System had 354 hirings in process.

3. <u>PERFORMANCE / VARIANCE ANALYSIS</u> & YEAR END PROJECTION

- Power System has 1,030 total vacancies with 354 in the process of being filled.
- Many positions within PSO, PCM and PTD can only be permanently filled after new trainees successfully complete training programs that can last 18 months to four years including, Load Dispatcher, Electric Station Operator, Steam Plant Assistant, Electrical Mechanic, and Electric Distribution Mechanic.
- PNBDTA's overtime variance of \$755K is primary driven by the increase demand in

new business meter installation, photovoltaic and battery energy storage, customer inspections, electrical vehicle work, and transformer design for upgrades.

- PSO's overtime variance of \$1.2M is primarily driven by the need to carry 24/7 coverage at Substation Operations; In-Basin Hydro-Electric Operations & Maintenance; Extra-High Voltage Station Organizations; Owens Valley Electric System Generations; and, Steam Generation. The overruns were due to emergency heat storm response; shift coverage; required cleaning of energized station equipment that can only be done outside normal business hours and on weekends/holidays to minimize impact on the system; high winds in October; staff coverage for vacant positions and for those on disability or time off; and, capital work including Distribution Transformer Replacement and Substation Automation, Beacon Energy Storage, AC Filter Replacement and Marketplace-Adelanto 500kV Line 1 C-Phase reactor, and Control Gorge Power Plant.
- PCM's overtime variance of \$6.6M is primarily driven by increase in new and/or current customer demands for upgrades; expansion of new stations to accommodate Electric Vehicles: accelerated work to keep the Sylmar AC Filter Replacement project and Haynes Demolition project on target; prep work to remove and relocate all mechanical and chemical piping and electrical connections to generate for Havnes Units 3-6; Substation Automation System relay protection upgrade; permanent Electric Service Restoration due to emergency outages; and, Central Repair and Fabrication Services support of other LADWP organizations.
- PTD's overtime variance of \$5.2M is primarily driven by vacancies, new MOU double overtime provisions.
- PSST's overtime variance of \$293K is mainly caused by on-call response to accidents and injuries, after-hours operation in the Training Center, work on Assigned

Exceeds Target

Day Off (ASDO) for training project setup and breakdown, LOA provisions to allow certain classifications to work on weekends for PTD, and new MOU double overtime provisions.

4. <u>MITIGATION PLAN AND / OR</u> <u>RECOMMENDATIONS</u>

- Continuously fill vacancies throughout the Power System.
- Coordinate with LADWP's Employment Services and City Personnel to maintain active eligible lists for critical and feeder classes.
- Operating Divisions should work closely with Power Safety and Training on size and frequency of future classes.
- Continue with plant and facility upgrades as well as progress on outstanding warranty items to increase reliability and reduce call outs.



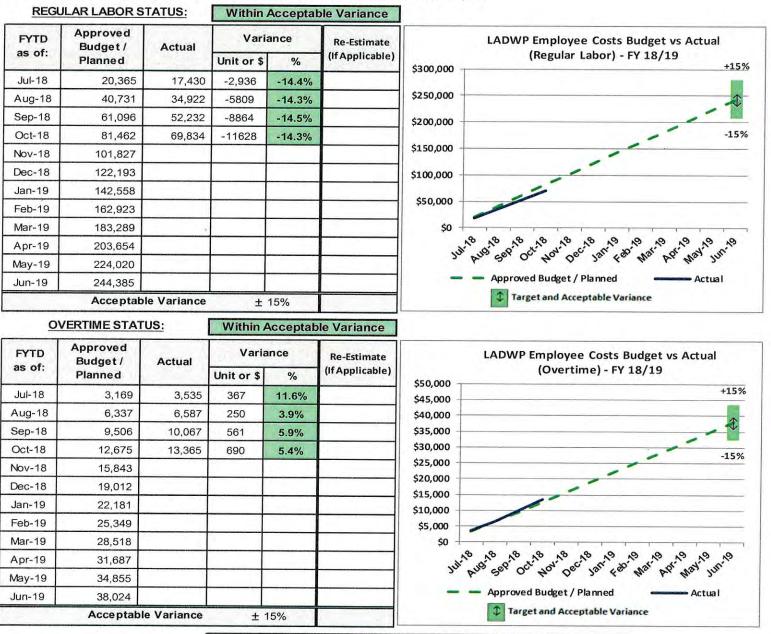
LADWP RATES METRIC – LADWP EMPLOYEE COST BUDGET VS. ACTUAL (Water System)

RESPONSIBLE MANAGER: Richard Harasick

REPORTING PERIOD: October 2018

DEFINITION OF RATES METRIC: LADWP Water System employee costs (including regular labor, overtime, pension and healthcare, excluding daily exempt and Utility Pre-Craft Trainee) budget vs. actual (\$M) **TARGET & ACCEPTABLE VARIANCE (FY 18/19):** +/- 15%

SOURCE OF DATA: Budget Reporting System (BRS) - Rates Metrics Report



Employee Cost Category	Budget	Actual	Variance	Variance %	FY 18/19 Approved
Regular Labor	81,462	69,834	-11,628	-14.3%	244,385
Overtime	12,675	13,365	690	5.4%	38,024
Regular Labor + Overtime	94,136	83,199	-10,938	-11.6%	282,409
Health Care Allocation	23,002	22,271	-731	-3.2%	69,006
Retirement & Death Benefit	36,635	34,658	-1,978	-5.4%	109,906
Total	153,774	140,127	-13,647	-8.9%	461,321

1. BACKGROUND / PURPOSE

 The Water System is comprised of six divisions: Water Executive Office, Water Resources, Water Engineering and Technical Services, Water Distribution, Water Operations, and Water Quality.

3. <u>PERFORMANCE / VARIANCE ANALYSIS</u> & YEAR END PROJECTION

Regular labor and overtime costs are within the acceptable variance.

2. ACHIEVEMENTS / MILESTONES MET

 The Water System has a total of 213 hires as of October 2018, a net of 56 new employees.

4. <u>MITIGATION PLAN AND / OR</u> <u>RECOMMENDATIONS</u>

• The Water System continues to monitor the effective use of overtime and execute the hiring plan.



ATTACHMENT II LADWP Rates Metrics Summary 2017-2018 Fiscal Year To Date (June 2018)

LADWP RATES METRICS SUMMARY

Related Rate Adjustment Factor	Category	#	Board Metric	Definition	FY 17/18 Target	Acceptable Variance	Responsible Manager	June 2018 Performance
	Repowering/Once Through Cooling	1	Repowering/Once Through Cooling budget vs. actual (\$M)	Board Approved Estimated Project Cost vs. Actual project costs	FY17/18 Board Approved Budget - May 2017	+/- 15%	Marcelo Di Paolo	-0.6%
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	Marcelo Di Paolo	
Reliability Cost	Power System Training Plan	3	Average cost of Power System Training Plan per trainee	Average cost of training for Electric Distribution Mechanic Technician (EDMT) classification per trainee that graduates from respective training program	EDMT: \$353.12K	+/- 15%	Brian Wilbur	14.4%
	Power System Training Plan	4	Average cost of Power System Training Plan per trainee	Average cost of training for Electrical Mechanic Technician (EMT) classification per trainee that graduates from respective training program	EMT: \$556.15	+/- 15%	Brian Wilbur	-14.8%
Adjustment Factor	Power System Training Plan	5	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: 27	+/- 15%	Brian Wilbur	51.9%
	Power System Training Plan	6	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	ЕМТ: 40	+/- 15%	Brian Wilbur	15.0%
	Renewable Portfolio Standard (Owned)	7	Total Renewable Portfolio Standard (RPS) Ratio (%)	GWh from RPS plants/GWh for all customers (State requirement)	27% RPS for Calendar Year 2017 29% RPS for Calendar Year 2018	+/- 3% of each canlendar year's goal toward state law mandates	John Giese	6.7%
Francis Cost	Renewable Portfolio Standard (Owned)	8	Total RPS cost (\$/MWh) vs. plan, by technology (Wind)	Total RPS purchased power cost (\$/MWh) as compared to plan, by technology (Wind)	Wind: \$88.50/MWh	+/- 15%	Jan Lukjaniec	-12.2%
Energy Cost Adjustment Factor	Renewable Portfolio Standard (Owned)	9	Total RPS cost (\$/MWh) vs. plan, by technology (Solar)	Total RPS purchased power cost (\$/MWh) as compared to plan, by technology (Solar)	Solar: \$74.44/MWh	+/- 15%	Jan Lukjaniec	-2.5%
	Renewable Portfolio Standard (Owned)	10	Total RPS cost (\$/MWh) vs. plan, by technology (Geothermal)	Total RPS purchased power cost (\$/MWh) as compared to plan, by technology (Geothermal)	Geothermal: \$80.67/MWh	+/- 15%	Jan Lukjaniec	1.5%

Related Rate Adjustment Factor	Category	#	Board Metric	Definition	FY 17/18 Target	Acceptable Variance	Responsible Manager	June 2018 Performance
	Renewable Portfolio Standard (Owned)	11	Total RPS cost (\$/MWh) vs. plan, by technology (Biogas)	Total RPS purchased power cost (\$/MWh) as compared to plan, by technology (Biogas)	Biogas: \$80.57/MWh	+/- 15%	Jan Lukjaniec	-100.0%
Energy Cost Adjustment Factor	Renewable Portfolio Standard (Purchased)	12	Average levelized cost of energy of purchased power agreements (PPAs) signed during the previous fiscal year	Cost per MWh for all PPAs	\$76.36/MWh	+/- 15%	Jan Lukjaniec	0.0%
	Power System Reliability Program (Generation)	13	Budget vs. actual (\$M) for capital in the Generation budget	Board Approved Annual Budget vs. Actual expenditures	FY17/18 Board Approved Budget - May 2017	+/- 15%	Robert Fick	6.8%
	Power System Reliability	14	Budget vs. actual (\$M) for capital included in the Transmission budget	Board Approved Annual Budget vs. Actual expenditures	FY17/18 Board Approved Budget - May 2017	+/- 15%	John Hormozi	11.8%
	Program (Transmission)	15	Budget vs. actual (\$M) for O&M expenses included in the Transmission budget	Board Approved Annual Budget vs. Actual expenditures	FY17/18 Board Approved Budget - May 2017	+/- 15%	Terry Jackson	-22.2%
	Power System Reliability Program (Transmission)	16	Cost per mile of underground circuits	Cost per mile of underground circuits	\$2.5 million	+/- 15%	Silvia Lozano	12.0%
	Power System Reliability	17	Budget vs. actual (\$M) for capital in the Substation budget	Board Approved Annual Budget vs. Actual expenditures	FY17/18 Board Approved Budget - May 2017	+/- 15%	Jeffrey Thornburg	40.8%
	Program (Substation)		Budget vs. actual (\$M) for O&M expenses in the Substation budget	Actual expenditures	FY17/18 Board Approved Budget - May 2017	+/- 15%	David Haerle	-8.2%
	Power System Reliability	19	Budget vs. actual (\$M) for capital in the Distribution budget	Board Approved Annual Budget vs. Actual expenditures	FY17/18 Board Approved Budget - May 2017	+/- 15%	Sager Farraj	6.0%
	Program (Distribution)	20	Budget vs. actual (\$M) for O&M expenses in the Distribution budget	Board Approved Annual Budget vs. Actual expenditures	FY17/18 Board Approved Budget - May 2017	+/- 15%	Mike Barkhuff	-1.1%
Reliability Cost Adjustment Factor		21	Number of fixed assets replaced against plan for critical Distribution assets (Transformers)	Numbers of transformers replaced against plan	Transformer: 800	+/- 15%	Mike Barkhuff	18.8%
Aujustment ractor	Power System Reliability	22	Number of fixed assets replaced against plan for critical Distribution assets (Poles)	Numbers of poles replaced against plan	Pole: 3,000	+/- 15%	Mike Barkhuff	0.6%
	Program (Distribution)	23	Number of fixed assets replaced against plan for critical Distribution assets (Crossarms)	Numbers of crossarms replaced against plan	Cross-arm: 10,000	+/- 15%	Mike Barkhuff	8.8%
		24	Number of fixed assets replaced against plan for critical Distribution assets (Cable)	Numbers of miles of cable replaced against plan	Cable: 48 miles	+/- 15%	Sager Farraj	7.1%

Related Rate Adjustment Factor	Category	#	Board Metric	Definition	FY 17/18 Target	Acceptable Variance	Responsible Manager	June 2018 Performance
		25	Average unit price for critical Distribution assets (Transformers)	Average unit price per transformer	Transformer: \$15.2k	+/- 15%	William Herriott	-34.2%
	Power System Reliability	26	Average unit price for critical Distribution assets (Poles)	Average unit price per pole	Pole: \$27.7k	+/- 15%	William Herriott	26.4%
	Program (Distribution)	27	Average unit price for critical Distribution assets (Cross-arms)	Average unit price per cross-arm	Cross-arm: \$2.5k	+/- 15%	William Herriott	-20.0%
		28	Average unit price for critical Distribution assets (Cable)	Average unit price per mile of cable	Cable: \$849.4k	+/- 15%	William Herriott	24.6%
Water (None)	Water System Staffing Program	29	Number of new distribution infrastructure crews as compared to plan	Number of new crews dedicated to distribution infrastructure as compared to plan	4 crews (32 employees)	N/A	Breonia Lindsey/Sandy Foster	53.1%
	Water Supply	30	Water supply costs budget vs. actual (\$M) for capital	Board Approved Annual Budget vs. Actual expenditures	FY17/18 Board Approved Budget - May 2017	+/- 10%	Dora Maese	-39.3%
	Water Supply	31	Water supply costs budget vs. actual (\$M) for O&M	Board Approved Annual Budget vs. Actual expenditures	FY17/18 Board Approved Budget - May 2017	+/- 10%	Dora Maese	28.5%
	Water Supply	32	Annual quantity of purchased water in acre-feet (AF) against plan	AF of water purchased against plan		Info only	Dora Maese	NA
	Water Supply	33	Annual quantity of recycled water delivered against plan (AF)	AF of recycled water delivered against plan	12,000 AF	+/- 10%	W. Van Wagoner	-18.5%
Water Supply Cost	Water Supply	34	Storwater system capacity milestones (AF) against plan	AF of stormwater system capacity as of a milestone date against plan	67,000 AF	+/- 10%	David Pettijohn	-2.5%
Adjustment Factor	Water Supply	35	Annual groundwater production in Central Basin (AF) against plan	AF of Groundwater in Central Basin against plan	No Target	Info only	Steven Cole	NA
	Water Supply	36	Annual groundwater production in	AF of Groundwater in San Fernando Basin against plan	No Target	Info only	Steven Cole	NA
	Capital Improvement Program	37	Budget vs. actual (\$M) for Aqueduct refurbishment capital	Board Approved Annual Budget vs. Actual expenditures	FY17/18 Board Approved Budget - May 2017	+/- 10%	Daniel Raftevold	-34.1%
	Capital Improvement Program	38		Board Approved Annual Budget vs. Actual expenditures	FY17/18 Board Approved Budget - May 2017	+/- 10%	Daniel Raftevold	28.5%
	Water Supply	39	Level of water conservation against target (GPCD)	Gallons per capita per day (GPCD) of water conserved against target	104 Gallons	+/- 3%	Penny Falcon	7.7%

Related Rate Adjustment Factor	Category	#	Board Metric	Definition	FY 17/18 Target	Acceptable Variance	Responsible Manager	June 2018 Performance
	Capital Improvement Program	40	e ,	Board Approved Annual Budget vs. Actual expenditures	FY17/18 Board Approved Budget - May 2017	+/- 10%	Dora Maese	-5.4%
	Capital Improvement Program	41		Board Approved Annual Budget vs. Actual expenditures	FY17/18 Board Approved Budget - May 2017	+/- 10%	Susan Rowghani	-40.7%
	Capital Improvement Program	42	0 11 0 1	Board Approved Annual Budget vs. Actual expenditures	FY17/18 Board Approved Budget - May 2017	+/- 10%	Susan Rowghani	-12.2%
Water Infrastructure Adjustment Factor	Capital Improvement Program	43	Assets replaced against plan	Feet of mainline replaced against plan	Mainline: 215,000 Feet	+/- 10%	Mainline & Meters: Breonia Lindsey/Sandy Foster	0.7%
	Capital Improvement Program	44	Assets replaced against plan	Feet of trunkline replaced against plan	Trunkline: 7,900 Feet	+/- 10%	Trunkline: Susan Rowghani	-22.9%
	Capital Improvement Program	45	1 8 1	Number of meters replaced against plan	Meters: 29,500	+/- 10%	Mainline & Meters: Breonia Lindsey/Sandy Foster	-4.4%
Water Quality Improvement Adjustment Factor	Water Quality Projects	46	Total Water Quality Budget vs. actual (\$M) for capital	Board Approved Annual Budget vs. Actual expenditures	FY17/18 Board Approved Budget - May 2017	+/- 10%	Susan Rowghani	-24.8%
	Water Quality Projects	47	Total Water Quality Budget vs. actual (\$M) for O&M	Board Approved Annual Budget vs. Actual expenditures	FY17/18 Board Approved Budget - May 2017	+/- 10%	Steven Cole	9.4%
Owens Valley Regulatory Adjustment Factor	Owens Valley	48	Budget vs. actual for Owens Lake O&M (\$M)	Board Approved Annual Budget vs. Actual expenditures	Target Suspended	Info only	Michael Grahek	NA
	Human Resources	49	plan	Total number of full time equivalent positions occupied vs. annual Authorized Personnel Resolution	FY17/18 Board Approved Annual Authorized Personnel Resolution - May 2017	+/- 15%	Shannon Pascual	-5.7%
	Financial and Human Resources Replacement Project	50	Financial and Human Resources Replacement Project total spending against plan	Board Approved Annual Budget vs. Actual expenditures	FY17/18 Board Approved Budget - May 2017	+/- 20%	Stephan Tucker	-73.6%

Related Rate Adjustment Factor	Category	#	Board Metric	Definition	FY 17/18 Target	Acceptable Variance	Responsible Manager	June 2018 Performance
Joint (None)	Financial and Human Resources Replacement Project	51	Financial and Human Resources Replacement Project progress against schedule		 Budget System Replacement Project (BSR) - Complete BSR Requirements & Differentiation Demos - 7/31/17 BSR - Award BSR Implementation Contract - 10/15/17 Enterprise Resource Plan (ERP) - Complete Revisions to KPMG Agreement - 12/1/17 ERP - Complete SWOT, ERP Requirements, and Statement of Work - 12/31/17 ERP - Advertise RFP for Software Vendor and System Integrator - 1/20/18 ERP - Advertise QA Services RFP - 3/31/18 ERP - Begin Proof of Concept Evaluations of ERP Solution(s) - 4/20/18 Project Management Office (PMO) - Complete & Approve Program Charter - 7/20/17 PMO - Complete & Approve Program Management Plans - 12/15/17 BSR - Complete BSR Implementation Phase 1 - 6/30/18 	+/- 60 Days based on DWP Project Plan TBD	Stephan Tucker	
	LADWP Employee Cost	52	LADWP Employee Cost Budget vs. Actual (\$M)	LADWP total employee costs (including regular labor, overtime, pension and healthcare, excluding daily exempt and Utility Pre-Craft Trainees) Budget vs. Actual	FY17/18 Board Approved Budget - May 2017	+/- 15%	LADWP Senior Management	-0.7%
	LADWP Employees per Customer Meter	53	Total Number of Water and Power Employees per Customer Meter	Total number of water and power employees (excluding daily exempt and Utility Pre-Craft Trainees) per water and power meters	No Target	Info only	Corporate Performance	NA
Energy Cost Adjustment Factor	Renewable Portfolio Standard (Owned)	54	Green House Gas (GHG) emissions reduction ratio	GHG emission for current year/GHG emission in 1990 (in millions of metric tons)	64%	+/- 5%	Mark Sedlacek	53.0%
	Energy Efficiency	55	Energy Efficiency (EE) ratio (%)	GWh installed compared to the 2010 baseline/GWh for all customers	1.75%	+/- 15%	David Jacot	7.8%
Energy Cost Adjustment Factor	Energy Efficiency		Budget vs. actual (\$M) for the overall EE portfolio Levelized EE program costs (\$/kWh)	Board Approved Annual Budget vs.	FY17/18 Board Approved Budget - May 2017	+/- 15%	David Jacot	-5.6%
	Energy Efficiency	57	iLevenzed EE program Costs (\$/KWh)	Lost per KWh over lifetime of installed energy efficiency solutions	Annual metric: Levelized Cost \$0.0649	+/- 15%	David Jacot	

Needs Attention

Power System

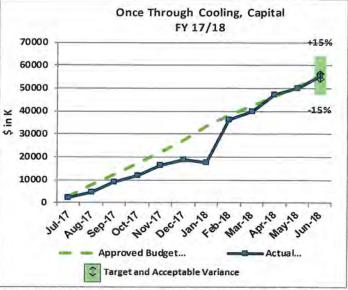
LADWP RATES METRIC - Once Through Cooling, Capital (Power)

RESPONSIBLE MANAGER: Marcelo Di Paolo and Silvia Lozano, Power Planning Development and Engineering Division

DEFINITION OF RATES METRIC: Board Approved FY 17/18 Budget vs. Actual Expenditures For Once Through Cooling/Repowering, Capital TARGET & ACCEPTABLE VARIANCE (FY 17/18): Target = \$55,549K; Acceptable Variance = ± 15%

STATUS: Within Acceptable Variance

FYTD as of:	Approved Budget	Actual		ince	Re-Estimate
	(\$ in K)	(\$ in K)	\$ in K	%	
Jul-17	2,680.6	2,210.9	-469.7	-17.5%	A
Aug-17	7,913.6	4,704.0	(3,209.6)	-40.6%	
Sep-17	12,366.3	9,241.0	(3,125.3)	-25.3%	++
Oct-17	17,173.8	11,965.0	(5,208.8)	-30.3%	
Nov-17	21,981.3	16,184.0	(5,797.3)	-26.4%	
Dec-17	27,143.4	18,904.0	(8,239.4)	-30.4%	
Jan-18	33,369.6	17,699.0	(15,670.6)	-47.0%	
Feb-18	38,177.1	36,347.0	(1,830.1)	-4.8%	
Mar-18	42,275.2	39,895.0	(2,380.2)	-5.6%	
Apr-18	46,226.9	47,256.0	1,029.1	2.2%	
May-18	50,888.0	49,938.0	(950.0)	-1.9%	
Jun-18	55,548.8	55,195.0	(353.8)	-0.6%	
-	Acceptable	e Variance	±	15%	
	SGS Repow eri			\$1,067M	12/31/2016
	SGS Repow erir	roject Total*	\$660M	12/31/2021	
	Haynes R	epow ering I	Project Total	\$701M	6/30/2025
		OTC P	ojects Total	\$2,428M	6/30/2025



REPORTING PERIOD: June 2018

*Note: SGS Repow ering Phase I consists of Job O1195; SGS Phase II consists of Jobs O9790, O9778, and O9782

SOURCE OF DATA: FI 21165 and FI 21150 (KPI # 01.03.01.05)

1. BACKGROUND / PURPOSE

 This is a summary of expenditures for capital projects per the State Water Resources Control Board's 2010 Statewide Once-Through Cooling (OTC) Policy to eliminate ocean water cooling.

2. ACHIEVEMENTS / MILESTONES MET

- Scattergood (SGS) Unit 3 Demolition contractor continued grading of U3 footprint and preparation for Unit 1 south wall installation.
- Haynes (HnGS) Units 3 6 Demolition completed asbestos removal of Unit 3 deteriorated insulation at elevation 10.
- Haynes (HnGS) Units 3 6 Demolition Project received sign-off for the Notice of Compliance amendment.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR PROJECTION

- Variance in June 2018 actual expenditure is due to:
 - SGS U1&2 Repowering Project (Job O9778) under expenditure is due to project delays associated with the Power System transmission system planning studies.
 - The under expenditure for Job O9778 (SGS U3 Repower) was offset by the over expenditure of Job O9793 (HnGS U3-6 Demo) to support decoupling activities for the demolition project.
 - Current actuals January dip and February spike are from negotiated spare parts purchases from claim settlement and current actuals April spike is from purchase of GE heating blankets. Both are for Job O1195 (SGS U3 Repower).

Total Project Approved From	1.153.01.0
Inception to FY25/26	\$1,876.9 M
Projects Approved to Date	\$1,155.7 M
Project Actuals to Date	\$1004.8 M
Total OTC Program Variance	-13.1%

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

- There is no mitigation plan at this time.
- The OTC Capital Construction Projects are currently on hold pending detailed transmission system studies on alternatives to repowering.
- The OTC projects are required to be completed by the December 2024 (SGS Repowering) and December 2029 (HnGS Repowering) deadlines to replace power generation capabilities at critical locations within the LADWP Power System which will be shutdown to comply with the California state mandate to eliminate ocean cooling at industrial facilities. Not meeting the OTC deadlines will compromise the LADWP power grid due to the loss of 297 megawatts of power from the SGS facility and 1,050 megawatts of power from the HnGS facility.

Within Acceptable Variance

Outside Acceptable Variance

Needs Attention

LADWP RATES METRIC - Once Through Cooling, Project Milestones (Power)

Power Planning Development and Engineering Division Provide REPORTING PERIOD: June 2018 RESPONSIBLE MANAGER: Marcelo Di Paolo and Silvia Lozano,

2

DEFINITION OF RATES METRIC: Repowering Project/ Once Through Cooling Project Milestones vs. Compliance Deadlines TARGET & ACCEPTABLE VARIANCE (FY 17/18): Target = Compliance deadlines and plants in-service dates against plans; Acceptable Variance ±45 days



Task	Planned	Actual	Acceptable Variance (+/-45 Days from Planned		
HAYNES (HnGS) DEMOLITION - ED4 SUBMITTAL AND ISSUE OF CAO REPORT	7/25/17	7/12/17	N/A	N/A	
HnGS DEMOLITION - ORDINANCE APPROVAL	9/25/17	9/27/17	10/09/17	8/11/17	
HnGS DEMOLITION – NEGATIVE DECLARATION APPROVAL	10/17/17	10/17/17	12/01/17	9/01/17	
SCATTERGOOD (SGS) DEMOLITION – SUBSTANTIAL COMPLETION	2/2/18	11/30/17	N/A	N/A	
HnGS DEMOLITION – ADVERTISE RFP	3/6/18	6/29/18	N/A	N/A	
SGS REGULATORY COMPLIANCE	12/31/24	x	02/14/25	11/16/24	
HnGS REGULATORY COMPLIANCE	12/31/29	х	02/14/30	11/16/29	

SOURCE OF DATA: Integrated Resources Plan/Graph (KPI # 04.02.05.03)

1. **BACKGROUND / PURPOSE**

Compliance with State Water Resources Board deadlines for Once-Through Cooling (OTC) units, December 2024 for Scattergood (SGS) and December 2029 for Haynes (HnGS).

ACHIEVEMENTS / MILESTONES MET 2.

- Scattergood (SGS) Unit 3 Demolition contractor continued grading of U3 footprint and preparation for Unit 1 south wall installation.
- Haynes (HnGS) Units 3 6 Demolition completed asbestos removal of Unit 3 deteriorated insulation at elevation 10.
- Haynes (HnGS) Units 3 6 Demolition Project received signoff for the Notice of Compliance amendment.

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

- The OTC Capital Construction Projects are currently on hold pending detailed transmission system studies on alternatives to repowering.
- Supply Chain Services reprioritized HnGS RFP advertisement date to June.

MITIGATION PLAN AND / OR RECOMMENDATIONS 4

Monitoring schedule critical paths closely to ensure compliance with milestone targets.

Exceeds Target



LADWP RATES METRIC – Average Cost per Electric Distribution Mechanic Trainee (Power)

RESPONSIBLE MANAGER: Brian Wilbur, Power System Safety and Training REPORTING PERIOD: June 2018

DEFINITION OF RATES METRIC: Average cost of training for Electric Distribution Mechanic Trainee (EDMT) classification per trainee that graduates from the training program

TARGET & ACCEPTABLE VARIANCE (FY 17/18): Target = \$353.1K per EDMT; Acceptable Variance = ± 15%

STATUS: Within Acceptable Variance

FYTD	Planned	Actual	Vari	Re-Estimate	
as of:	(\$/trainee)	(\$/trainee)	\$	%	ne Estimate
Jan-18	353.1	319.2	(34.0)	-9.6%	
Feb-18	353.1	598.1	245.0	69.4%	_
Mar-18	353.1	500.9	147.8	41.8%	
Apr-18	353.1	525.6	172.5	48.8%	
May-18	353.1	360.1	7.0	2.0%	
Jun-18	353.1	403.8	50.7	14.4%	
Ann. Avg.	353.1	375.2	22.1	6.3%	
	Accepta	able Variance	±	15%	

SOURCE OF DATA: Jobs X7922/X7999/X7955 (KPI # 04.01.02.10)

1. BACKGROUND / PURPOSE

 To effectively calculate a monthly cost per trainee for an Electric Distribution Mechanic (EDM) completing a 42 month on-the-job and classroom training program.

2. ACHIEVEMENTS / MILESTONES MET

 The March 2018 (ALM 14) class produced 17 graduates in February with two additional graduates in March.

3. <u>PERFORMANCE / VARIANCE ANALYSIS</u> <u>& YEAR END PROJECTION</u>

- The monthly cost per trainee calculation will vary from month to month. It's based on a number of factors which include the adjusted class size, dropouts, terminations and the final number of graduates.
- The cost per trainee is trending higher because of the increased overall actuals in the trainer Job X7999 as compared to the month of May.
- Annualized Job totals for (X7922/X7999/X7955) vary depending on the tools and materials purchased for subsequent new classes.

 The Annual Average of \$375.2k was calculated using the final figures of the related Jobs (X7922/X7999/X7955) for the entire fiscal year with the 12 month average trainee occupancy.

4. <u>MITIGATION PLAN AND / OR</u> <u>RECOMMENDATIONS</u>

 The screening process is continually being reviewed in an effort to increase the quality of candidates and to reduce the dropout rate. Overhead and underground disciplines are no longer separated and all future trainees are cross-trained in both.

B-)L



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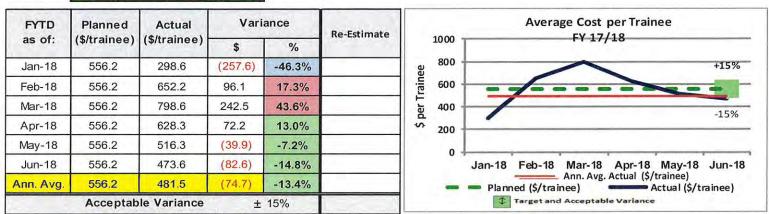
LADWP RATES METRIC – *Average Cost per Electrical Mechanic Trainee (Power)*

RESPONSIBLE MANAGER: Brian Wilbur, Power System Safety and Training REPORTING PERIOD: June 2018

DEFINITION OF RATES METRIC: Average cost of training for Electrical Mechanic Trainee (EMT) classification per trainee that graduates from the training program

TARGET & ACCEPTABLE VARIANCE (FY 17/18): Target = \$556.2K per EMT graduate; Acceptable Variance = ± 15%

STATUS: Within Acceptable Variance



SOURCE OF DATA: Jobs X7923/X7926/X7955 (KPI # 04.01.02.11)

1. BACKGROUND / PURPOSE

 To effectively calculate a monthly cost per trainee for an Electrical Mechanic (EM) completing a 40 month On-the-job and classroom training program.

2. ACHIEVEMENTS / MILESTONES MET

• The January 2018 (18A) class initially produced 19 graduates with two additional in March bringing the total to 21.

3. <u>PERFORMANCE / VARIANCE ANALYSIS</u> <u>& YEAR END PROJECTION</u>

- The monthly cost per trainee calculation will vary from month to month. It's based on a number of factors which include the adjusted class size, dropouts, terminations and the final number of graduates.
- The cost per trainee is trending lower because of the lower overall costs for the trainees and admin Jobs X7923 and X7955 as compared to the month of May.

- Annualized Job totals for (X7923/X7926/X7955) vary depending on the tools and materials purchased for subsequent new classes.
- The Annual Average of \$481.5k was calculated using the final figures of the related Jobs (X7923/X7926/X7955) for the entire fiscal year with the 12 month average trainee occupancy.

4. <u>MITIGATION PLAN AND / OR</u> <u>RECOMMENDATIONS</u>

 The screening process is continually being reviewed in an effort to increase the quality of candidates and to reduce the dropout rate.



Needs Attention

4

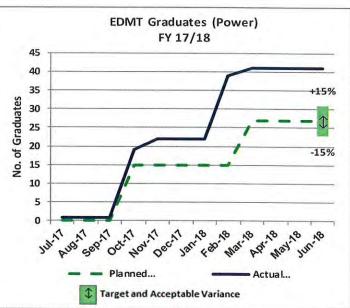
LADWP RATES METRIC - EDMT Graduates (Power)

RESPONSIBLE MANAGER: Brian Wilbur, Power System Safety & Training

REPORTING PERIOD: June 2018

DEFINITION OF RATES METRIC: Electrical Distribution Mechanic Trainee (EDMT) Graduates Against Training Plan **TARGET & ACCEPTABLE VARIANCE (FY 17/18):** Target = 27 graduates; Acceptable Variance = ± 15%

TATUS:	Exc	eeds Targe			
FYTD	Planned (No. of	Actual (No. of	Varia	ance	Re-Estimate
as of:	Grads.)	Grads.)	No.	%	
Jul-17	0	1	1	N/A	
Aug-17	0	1	1	N/A	
Sep-17	0	1	1	N/A	
Oct-17	15	19	4	26.7%	
Nov-17	15	22	7	46.7%	· · · · · · · · · · · · · · · · · · ·
Dec-17	15	22	7	46.7%	
Jan-18	15	22	7	46.7%	
Feb-18	15	39	24	160.0%	
Mar-18	27	41	14	51.9%	
Apr-18	27	41	14	51.9%	
May-18	27	41	14	51.9%	
Jun-18	27	41	14	51.9%	
	Acceptab	le Variance	±	15%	



SOURCE OF DATA: Monthly updates provided by the training superintendents. (KPI # 04.01.02.08)

1. BACKGROUND / PURPOSE

 Power System Safety and Training provides the Department with an in-house training operation designed to produce highly qualified Electric Distribution Mechanic (EDMs) to fill the needs of the Power Transmission and Distribution Division. Retirements, promotions, and expected growth in this classification are the basis for hiring practices and training plans.

2. ACHIEVEMENTS / MILESTONES MET

 The March 2018 (ALM 14) class produced 17 graduates in February with two additional graduates in March.

3. <u>PERFORMANCE / VARIANCE ANALYSIS</u> <u>& YEAR END PROJECTION</u>

 Due to the modified screening process, there has been an increase in the quality of candidates who have entered the training program, yielding a higher graduation rate.

4. <u>MITIGATION PLAN AND / OR</u> <u>RECOMMENDATIONS</u>

 The screening process is continually being reviewed in an effort to increase the quality of candidates and to reduce the dropout rate.
 Overhead and underground disciplines are no longer separated and all future trainees are cross-trained in both.



LADWP RATES METRIC - EMT Graduates (Power)

RESPONSIBLE MANAGER: Brian Wilbur, Power System Safety & Training

REPORTING PERIOD: June 2018

DEFINITION OF RATES METRIC: Electrical Mechanic Trainee (EMT) Graduates Against Training Plan **TARGET & ACCEPTABLE VARIANCE (FY 17/18):** Target = 40 graduates; Acceptable Variance = ± 15%

STATUS: Within Acceptable Variance Planned Actual Variance FYTD **EMT Graduates (Power) Re-Estimate** (No. of (No. of as of: FY 17/18 Grads.) Grads.) No. % 50 +15% Jul-17 0 0 0 0.0% 45 Aug-17 22 25 3 13.6% 40 Sep-17 22 25 3 of Graduates 35 13.6% 30 Oct-17 22 25 3 13.6% -15% 25 Nov-17 22 25 3 13.6% 20 Dec-17 22 25 3 13.6% No. 15 4 Jan-18 40 44 10.0% 10 Feb-18 40 44 4 10.0% 5 46 0 Mar-18 40 6 15.0% Sepat AUST H04.17 Decil 131118 JUNT octal 2 40 46 6 Apr-18 15.0% 400 Mar way May-18 40 46 6 15.0% Planned... Actual... Jun-18 40 46 6 15.0% T **Target and Acceptable Variance** Acceptable Variance ± 15%

SOURCE OF DATA: Monthly updates provided by the training superintendents. (KPI # 04.01.02.09)

1. BACKGROUND / PURPOSE

 Power System Safety & Training provides the Department with an in-house training program designed to produce highly qualified Electrical Mechanics (EMs) to fill the needs of the Power Construction & Maintenance (PC&M) Division. Retirements, promotions, and expected growth in this classification are the basis for hiring practices and training plans. To offset the hiring deficiencies of previous years, the plan is to increase trainees being hired over the next five years, and to streamline the training program to meet the goals of the Power System and PC&M Division.

2. ACHIEVEMENTS / MILESTONES MET

 The January 2018 (18A) class initially produced 19 graduates with two additional in March bringing the total to 21.

3. <u>PERFORMANCE / VARIANCE ANALYSIS</u> <u>& YEAR END PROJECTION</u>

 Hiring deficiencies from 2010 through 2013 have resulted in minimal numbers of graduates in recent years. Due to the modified screening process, there has been an increase in the quality of candidates who have entered the training program, yielding a higher graduation rate.

4. <u>MITIGATION PLAN AND / OR</u> <u>RECOMMENDATIONS</u>

 There is an aggressive hiring plan to add approximately 60 EMTs per year over the next five years to meet PC&M's IHRP staffing goals. Restructuring of the Training Program and an increase in training staff has enabled PSST to move forward with this hiring plan while still maintaining the quality and integrity of the program.

Stech for BW

Within Acceptable Variance

Outside Acceptable Variance



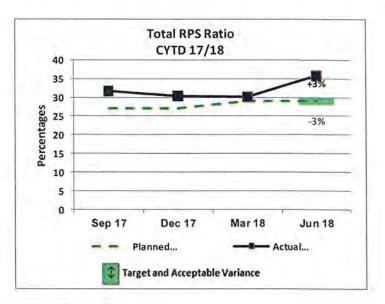
LADWP RATES METRIC - Total Renewal Portfolio Standard (Power)

RESPONSIBLE MANAGER: John Giese, Power and Fuel Purchase

REPORTING PERIOD: June 2018

DEFINITION OF RATES METRIC: GWH from RPS Resource/GWH of Retail Sales (State Requirement), In Percentages (%) **TARGET & ACCEPTABLE VARIANCE (FY 17/18):** Target = 27% for calendar year 2017 and 29% for calendar year 2018; Acceptable Variance = ± 3%

TATUS:	Exc			
CYTD	Planned	Actual	Variance	Re-Estimate (If Applicable)
as of:	(%)	(%)	%	
Sep 17	27.0	31.7	4.7%	
Dec 17	27.0	30.3	3.3%	1
Mar 18	29.0	30.2	1.2%	
Jun 18	29.0	35.7	6.7%	
Accepta	ble Variance		± 3%	



SOURCE OF DATA: Wholesale Energy Resource Management Group (KPI # 05.01.01.01)

1. BACKGROUND / PURPOSE

- Los Angeles Department of Water and Power (LADWP) is on target to meet the 33% Renewable Portfolio Standard (RPS) ratio requirement in 2020 and 50% in 2030, as required by the California Energy Commission (CEC).
- RPS portfolio includes Wind, Solar, Biogas, Geothermal, and Small Hydro.
- To comply with the CEC, RPS percentages are calculated over four years (Compliance Period), not fiscal year or fiscal year-to-date basis.
- There are other RPS-related Rates Metric Reports for Wind, Solar, Biogas, and Geothermal.
- The Biogas contract was cancelled in May 2018.

2. ACHIEVEMENTS / MILESTONES MET

 In the fourth quarter of FY 17/18, ARP Loyalton Biomass (8.9 MW) came online.

3. <u>PERFORMANCE / VARIANCE ANALYSIS</u> & YEAR END PROJECTION

 Revisions were made to previously reported RPS percentages as listed in the table below:

CYTD as of:	Actual RPS % (previous)	Actual RPS % (updated)	Change %
Sep 2017	31.5	31.7	+0.2
Dec 2017	30.2	30.3	+0.1
Mar 2018	30.4	30.2	-0.2

- The reason for the changes in previously reported RPS actual percentages are listed as follows:
 - Update in Total Sales to Ultimate Customers (TSUC) Calculation: deducts the Purpose of Enterprise and Power Consumption by the Water Division from the TSUC. Previously, the Power Consumption was not available to factor into the actual RPS.
 - Biomethane Uncertainty: Pending decision from LADWP's Regulatory group on reporting biomethane Renewable Energy Credits (REC). As a result, biomethane RECs have been removed for November 2017 to March 2018.
 - Ineligible RECs: Values will change after-thefact based on periodic updates.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

- Uncertainty in performance of renewable resources, evolving accounting methods, changing regulations, and transmission disruptions are risk factors that can impact the performance of this metric.
- To meet the RPS goals and avoid the risk of noncompliance with the CEC's RPS requirement, LADWP uses targets (forecasts) above the CEC's RPS ratio requirement. This will provide a hedge against the above-mentioned risk factors.
- Excess Renewable Energy Credits (RECs) from one compliance period can be rolled over into the next compliance period.
- Current Year 2018 soft target per the CEC is 29%. LADWP's RPS compliance percentage is calculated over four years (2017-2020).

LADWP RATES METRIC - Total RPS Cost vs. Plan, By Wind (Power)

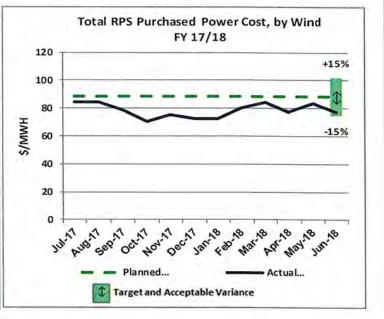
RESPONSIBLE MANAGER: Jan Lukjaniec, Power External Energy Resources *Reporting Period*: June 2018

DEFINITION OF RATES METRIC: Total RPS Purchased Power Cost (\$/MWH), Per Power Purchase Agreements (PPA), As Compared To Plan, By Wind

TARGET & ACCEPTABLE VARIANCE (FY 17/18): Target = \$88.50/MWH; Acceptable Variance = ± 15%

STATUS: Within Acceptable Variance

FYTD	Planned	Actual	Vari	Re-Estimate	
as of:	(\$/MWH)	(\$/MWH)	\$	%	Ne-Lotiniate
Jul-17	88.50	84.18	-4.32	-4.9%	
Aug-17	88.50	84.20	-4.30	-4.9%	
Sep-17	88.50	79.11	-9.39	-10.6%	12
Oct-17	88.50	70.74	-17.76	-20.1%	
Nov-17	88.50	75.43	-13.07	-14.8%	-
Dec-17	88.50	72.67	-15.83	-17.9%	
Jan-18	88.50	72.43	-16.07	-18.2%)
Feb-18	88.50	80.45	-8.05	-9.1%	
Mar-18	88.50	84.08	-4.42	-5.0%	
Apr-18	88.50	77.23	-11.27	-12.7%	
May-18	88.50	83.79	-4.71	-5.3%	
Jun-18	88.50	77.71	-10.79	-12.2%	



8

SOURCE OF DATA: Monthly energy invoice per PPA (KPI # 01.03.01.06)

1. BACKGROUND / PURPOSE

- PPA = Power Purchase Agreement. The energy cost is calculated at plant's "busbar", in dollars per mega-watt-hour (\$/MWH), per executed PPA.
- The aggregated energy costs are the weighted average of seven wind PPAs for which the \$/MWH cost is determined by the seven individual PPAs, but the energy outputs are a function of the individual project's capacity and wind resource availability, which is variable.
- Wind energy supports meeting Renewable Portfolio Standard (RPS) goals. Wind energy is currently estimated to represent 32.6% of the Calendar Year 2018 RPS portfolio.
- Contributing Projects and Contracted Price:
 - Pleasant Valley \$63.00 /MWh
 - Willow Creek \$100.07/MWh
 - Pebble Springs \$68.98 /MWh
 - Milford Phase I \$85.97/MWh*
 - Milford Phase II \$92.56/MWh*
 - Windy Flats \$85.54/MWh*
 - Manzana \$82.50/MWh

*Value includes prepay and excess energy cost

Within Acceptable Variance

2. ACHIEVEMENTS / MILESTONES MET

- PPA projects are performing as expected.
- 3. <u>PERFORMANCE / VARIANCE ANALYSIS</u> <u>& YEAR END PROJECTION</u>
 - Performance of the PPA projects is regularly monitored.
- 4. <u>MITIGATION PLAN AND / OR</u> <u>RECOMMENDATIONS</u>
 - There is no mitigation plan needed at this time.

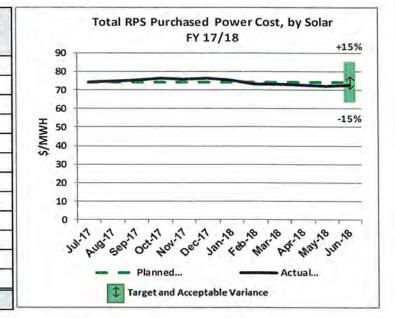
LADWP RATES METRIC - Total RPS Cost vs. Plan, By Solar (Power)

RESPONSIBLE MANAGER: Jan Lukjaniec, Power External Energy Resources JL REPORTING PERIOD: June 2018

DEFINITION OF RATES METRIC: Total RPS Purchased Power Cost (\$/MWH), Per Power Purchase Agreements (PPA), As Compared To Plan, By Solar

TARGET & ACCEPTABLE VARIANCE (FY 17/18): Target = \$74.44/MWH; Acceptable Variance = ± 15%

STATUS: Within Acceptable Variance Variance FYTD Planned Actual Re-Estimate as of: (\$/MWH) (\$/MWH) \$ % **Jul-17** 74.44 73.97 -0.47 -0.6% 74.44 74.87 0.43 0.6% Aug-17 Sep-17 74.44 75.25 0.81 1.1% 74.44 76.40 1.96 2.6% Oct-17 74.44 75.64 1.6% Nov-17 1.2 Dec-17 74.44 76.18 1.74 2.3% Jan-18 74.44 75.15 0.71 1.0% -1.39 73.05 -1.9% Feb-18 74.44 Mar-18 74.44 73.09 -1.35 -1.8% 74.44 72.83 -1.61 -2.2% Apr-18 74.44 72.27 -2.17 -2.9% May-18 72.58 -2.5% Jun-18 74.44 -1.86 Acceptable Variance ± 15%



SOURCE OF DATA: Monthly energy invoice per PPA (KPI # 01.03.01.17)

1. BACKGROUND / PURPOSE

- PPA = Power Purchase Agreement. The energy cost is calculated at plant's "busbar", in dollars per mega-watt-hour (\$/MWH), per executed PPA.
- The aggregated energy costs are the weighted average of the solar PPAs for which the \$/MWH cost is fixed by individual PPAs, but the energy outputs are a function of the individual project's capacity and solar resource availability, which is variable.
- Solar energy supports meeting Renewable Portfolio Standard (RPS) goals. Solar energy is currently estimated to represent 39.7% of the Calendar Year 2018 RPS portfolio.
- Contributing Projects and Contracted Price:
 - Copper Mountain Solar 3 \$95.75 /MWh
 - Springbok 1 Solar \$68.60/MWh
 - Springbok 2 Solar \$58.65 /MWh
 - RE Barren Ridge
 - Moapa Southern Paiute \$87.69/MWh
 - Beacon Solar 1

Within Acceptable Variance

Beacon Solar 2 \$56.06/MWh

•	Beacon Solar 3	\$49.47/MWh
•	Beacon Solar 4	\$50.61/MWh
		the second se

Beacon Solar 5 \$57.35/MWh

2. ACHIEVEMENTS / MILESTONES MET

- The following solar projects reached full commercial operation during the current fiscal year: Beacon Solar 2 and 5 on 09/29/17.
- PPA expenditures on the solar projects are lower than anticipated.

3. <u>PERFORMANCE / VARIANCE ANALYSIS</u> <u>& YEAR END PROJECTION</u>

 Performance of the PPA projects is regularly monitored.

4. <u>MITIGATION PLAN AND / OR</u> <u>RECOMMENDATIONS</u>

There is no mitigation plan at this point.

Outside Acceptable Variance

\$65.83/MWh

\$50.61/MWh

Needs Attention

LADWP RATES METRIC – *Total RPS Cost vs. Plan, By Geothermal (Power)*

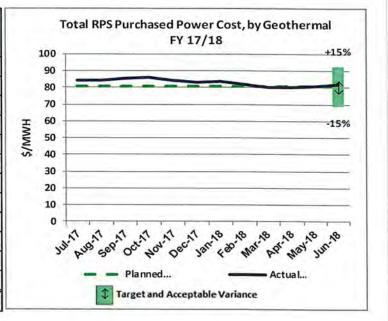
RESPONSIBLE MANAGER: Jan Lukjaniec, Power External Energy Resources The REPORTING PERIOD: June 2018

DEFINITION OF RATES METRIC: Total RPS Purchased Power Cost (\$/MWH), Per Power Purchase Agreements (PPA), As Compared To Plan, By Geothermal

TARGET & ACCEPTABLE VARIANCE (FY 17/18): Target = \$80.67/MWH; Acceptable Variance = ± 15%

STATUS: Within Acceptable Variance

FYTD	Planned	Actual	Vari	Re-Estimate	
as of:	(\$/MWH)	(\$/MWH)	\$	%	
Jul-17	80.67	84.18	3.51	4.4%	
Aug-17	80.67	84.18	3.51	4.4%	
Sep-17	80.67	85.52	4.85	6.0%	
Oct-17	80.67	85.75	5.08	6.3%	T
Nov-17	80.67	84.05	3.38	4.2%	
Dec-17	80.67	82.83	2.16	2.7%	
Jan-18	80.67	83.37	2.70	3.3%	
Feb-18	80.67	81.93	1.26	1.6%	
Mar-18	80.67	80.24	-0.43	-0.5%	
Apr-18	80.67	80.05	-0.62	-0.8%	
May-18	80.67	80.94	0.27	0.3%	
Jun-18	80.67	81.87	1.20	1.5%	1



SOURCE OF DATA: Monthly energy invoice per PPA (KPI # 01.03.01.18)

1. BACKGROUND / PURPOSE

- PPA = Power Purchase Agreement. The energy cost is calculated at plant's "busbar", in dollars per mega-watt-hour (\$/MWH), per executed PPA.
- The aggregated energy costs are the weighted average of four geothermal PPAs for which the \$/MWH cost is fixed for firm and imbalance energy. However, the energy outputs are a function of the individual project's capacity and geothermal resource availability, which is variable.
- Geothermal energy supports meeting Renewable Portfolio Standard (RPS) goals. Geothermal energy is currently estimated to represent 21.1% of the Calendar Year 2018 RPS portfolio.
- Contributing Projects and Contracted Price:
 - Don A Campbell Phase 1 \$99.00/MWh
 - Don A Campbell Phase 2 \$81.25/MWh
 - Hudson Ranch \$85.29/MWh
 - Heber 1 \$81.20/MWh
 - Ormesa Geo Complex \$77.25/MWh
 - ONNGP

2. ACHIEVEMENTS / MILESTONES MET

 The second project, Steamboat Hills, of the Ormant Northern Nevada Geothermal Portfolio (ONNGP) met commercial operation in March 16, 2018.

3. <u>PERFORMANCE / VARIANCE ANALYSIS</u> <u>& YEAR END PROJECTION</u>

- Performance of the PPA projects is regularly monitored.
- The current variance is within tolerance and of no immediate concern.

4. <u>MITIGATION PLAN AND / OR</u> <u>RECOMMENDATIONS</u>

There is no mitigation plan at this time.

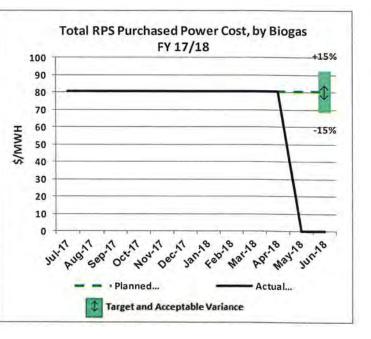
\$75.50/MWh

LADWP RATES METRIC - Total RPS Cost vs. Plan, By Biogas (Power)

RESPONSIBLE MANAGER: Jan Lukjaniec, Power External Energy Resources *Processing Reporting Period*: June 2018 DEFINITION OF RATES METRIC: Total RPS Purchased Power Cost (\$/MWH), Per Power Purchase Agreements (PPA), As Compared To Plan, By Biogas

TARGET & ACCEPTABLE VARIANCE (FY 17/18): Target = \$80.57/MWH; Acceptable Variance = ± 15%

			and the second second	
Planned	Actual	Vari	ance	Re-Estimate
(\$/MWH)	(\$/MWH)	\$	%	
80.57	80.57	0	0.0%	
80.57	80.57	0	0.0%	
80.57	80.57	0	0.0%	
80.57	80.57	0	0.0%	
80.57	80.57	0	0.0%	
80.57	80.57	0	0.0%	
80.57	80.57	0	0.0%	
80.57	80.57	0	0.0%	
80.57	80.57	0	0.0%	
80.57	80.57	0	0.0%	
80.57	0	-80.57	-100.0%	
80.57	0	-80.57	-100.0%	
	80.57 80.57 80.57 80.57 80.57 80.57 80.57 80.57 80.57 80.57 80.57 80.57	80.57 80.57 80.57 80.57 80.57 80.57 80.57 80.57 80.57 80.57 80.57 80.57 80.57 80.57 80.57 80.57 80.57 80.57 80.57 80.57 80.57 80.57 80.57 80.57 80.57 80.57 80.57 80.57 80.57 80.57 80.57 80.57 80.57 80.57 80.57 80.57 80.57 80.57 80.57 80.57	80.57 80.57 0 80.57 80.57 0 80.57 80.57 0 80.57 80.57 0 80.57 80.57 0 80.57 80.57 0 80.57 80.57 0 80.57 80.57 0 80.57 80.57 0 80.57 80.57 0 80.57 80.57 0 80.57 80.57 0 80.57 80.57 0 80.57 80.57 0 80.57 80.57 0 80.57 80.57 0 80.57 80.57 0 80.57 80.57 0 80.57 0 -80.57 80.57 0 -80.57 80.57 0 -80.57	\$ \$ % 80.57 80.57 0 0.0% 80.57 80.57 0 0.0% 80.57 80.57 0 0.0% 80.57 80.57 0 0.0% 80.57 80.57 0 0.0% 80.57 80.57 0 0.0% 80.57 80.57 0 0.0% 80.57 80.57 0 0.0% 80.57 80.57 0 0.0% 80.57 80.57 0 0.0% 80.57 80.57 0 0.0% 80.57 80.57 0 0.0% 80.57 80.57 0 0.0% 80.57 80.57 0 0.0% 80.57 80.57 0 0.0% 80.57 0 -100.0% 80.57 80.57 0 -80.57 -100.0%



11

SOURCE OF DATA: Monthly energy invoice per PPA (KPI # 01.03.01.19)

1. BACKGROUND / PURPOSE

- Biogas fuel supports meeting Renewable Portfolio Standards (RPS) goals.
- Biogas fuel is currently estimated to represent 0.3% of the Calendar Year 2018 RPS portfolio.

2. ACHIEVEMENTS / MILESTONES MET

- Expected volumes of biogas fuel were delivered/purchased.
- No fuel was purchased or delivered since May 2018.

3. <u>PERFORMANCE / VARIANCE ANALYSIS</u> <u>& YEAR END PROJECTION</u>

- Biogas fuel contract price was billed as per the contract. No variance prior to May.
- The contract for Biogas was cancelled effective May 1, 2018. All actuals after May 1, 2018, will be zero.
- The decision to end this contract results in a gross savings of \$90 million to ratepayers.

4. <u>MITIGATION PLAN AND / OR</u> <u>RECOMMENDATIONS</u>

There is no mitigation plan at this time.

LADWP RATES METRIC – Average Levelized Cost of Energy For¹² Purchased Power Agreements (Power)

 RESPONSIBLE MANAGER: Jan Lukjaniec, Power External Energy Resources
 Image: Second Second

STATUS: Within Acceptable Variance

FYTD Planned as of: (\$/MWH)		Actual	Variance		Re-Estimate	Average Levelized Cost of Energy for PPAs FY 17/18		
		(\$/MWH)	(\$/MWH) \$					
Jul-17	76.36	76.38	0.02	0.0%	1	90 -	+15%	
Aug-17	76.36	76.38	0.02	0.0%		80 -		
Sep-17	76.36	76.38	0.02	0.0%		70 -	<u> </u>	
Oct-17	76.36	76.38	0.02	0.0%		60 50 40	-15%	
Nov-17	76.36	76.38	0.02	0.0%		W/S 40		
Dec-17	76.36	76.38	0.02	0.0%	1	30		
Jan-18	76.36	76.38	0.02	0.0%		20		
Feb-18	76.36	76.38	0.02	0.0%	2	10 -		
Mar-18	76.36	76.38	0.02	0.0%	1	0 -		
Apr-18	76.36	76.38	0.02	0.0%	1	10	hand see oct how been sen teo he her her her her her her her her sen sun o	
May-18	76.36	76.38	0.02	0.0%	<u></u>			
Jun-18	76.36	76.38	0.02	0.0%	1		· Planned Actual	
	Accepta	ble Variance	±	15%			Target and Acceptable Variance	

SOURCE OF DATA: Monthly RPS Report from "RPS Development Group" (KPI # 01.03.01.07)

1. BACKGROUND / PURPOSE

- PPA = Power Purchase Agreement. The energy cost is calculated at plant's "busbar", in dollars per mega-watt-hour (\$/MWH), per executed PPA.
- The PPAs support meeting RPS goals.

2. ACHIEVEMENTS / MILESTONES MET

 During Fiscal Year 16/17, two geothermal PPAs were executed – Ormesa Geothermal (December 20, 2016) and Ormat Geothermal (May 19, 2017).

3. <u>PERFORMANCE / VARIANCE ANALYSIS</u> <u>& YEAR END PROJECTION</u>

 As stated under the next section, Mitigation Plan and/or Recommendations, this metric will not change on a monthly basis as it is a comparison of the weighted average of prices of PPAs signed in FY 16/17, which were Ormesa Geothermal and Ormat Geothermal. The actual varies slightly from the Planned due to rounding error.

4. <u>MITIGATION PLAN AND / OR</u> <u>RECOMMENDATIONS</u>

- The metric will not change on a monthly basis as it is a comparison of the weighted average of prices of PPAs signed in individual fiscal years, and therefore, a monthly mitigation plan is not necessary.
- Once future fiscal years occur, a comparison of the weighted average of prices of PPAs signed in individual fiscal years can be performed and potential recommendations will be made.

LADWP RATES METRIC - PSRP Generation, Capital (Power)

RESPONSIBLE MANAGER: Robert Fick, Power Supply Operations

REPORTING PERIOD: June 2018

13

DEFINITION OF RATES METRIC: Budget Approved Annual Budget vs. Actual Expenditures For PSRP Generation, Capital **TARGET & ACCEPTABLE VARIANCE (FY 17/18):** Target = \$17,658.7K; Acceptable Variance = ± 15%

STATUS: Within Acceptable Variance

FYTD	Approved Budget	Actual	Varia	ince	Re-Estimate	PSRP Generation, Capital
as of:	(\$ in K)	(S in K)	\$ in K	%	(If Applicable)	FY 17/18
Jul-17	1,424.7	1,005.4	-419.3	-29.4%	2	+159
Aug-17	2,849.4	1,947.1	-902.3	-31.7%		20000
Sep-17	4,274.0	2,621.7	-1,652.3	-38.7%		
Oct-17	5,698.7	4,174.7	-1,524.0	-26.7%		× 15000
Nov-17	7,123.4	5,532.3	-1,591.1	-22.3%		·= -159
Dec-17	8,548.1	6,936.0	-1,612.1	-18.9%		10000
Jan-18	10,139.5	9,344.0	-795.5	-7.8%		5000
Feb-18	11,730.9	11,825.0	94.1	0.8%		
Mar-18	13,377.8	15,056.0	1,678.2	12.5%		0
Apr-18	14,802.5	16,256.0	1,453.5	9.8%		July prograd Sept Oct Nor Decri Jours Hours Hours Por Way on 10
May-18	16,227.2	17,173.0	945.8	5.8%		
Jun-18	17,658.7	18,866.0	1,207.3	6.8%		Approved Budget Actual
	Acceptal	ble Variance	±	15%	14.2%	Target and Acceptable Variance

SOURCE OF DATA: FI 21186 (KPI # 01.03.01.08)

1. BACKGROUND / PURPOSE

 This metric measures the planned vs. actual expenditures for Generation capital activities, including major unit overhauls, transformer replacements, and replacement of a 6MW hydro power plant. These activities will ensure safety and maximize reliability, availability, efficiency, and extend the life of generating assets.

2. ACHIEVEMENTS / MILESTONES MET

- Castaic Power Plant (CPP) Started weld repair of the stator lamination brackets; Completed preparation of the wicket gate prior to installation; completed repairs to the damaged threaded hole in the turbine runner; moved temporary shutoff valve (TSOV) into position; and clean and inspect TSOV guide ring.
- CPP Unit 1 Main Bank Transformer Installation, assembly, and diagnostic testing were completed this fiscal year. The transformer is in service and fully operational.
- CPP Unit 2 Main Bank Transformers Installation scheduled on October 5, 2018. Project Complete 72%
- Haynes GS U2&8 main bank Dissolve Gas Analyzers (DGAs) – Engineering reviewed available existing cable routes and is making up prints for the Construction Work Package (CWP). DGA terminal cabinets were received in May. Project Complete 65%
- Haynes GS Units 1, 9, and 10 Main Bank DGAs Engineering continues to work on detailed design drawings for the CWP. Project Complete 37%

3. <u>PERFORMANCE / VARIANCE ANALYSIS & YEAR END</u> <u>PROJECTION</u>

- The FI is currently within the acceptable variance range.
 - CPP Major Overhaul is currently overrun by \$8.6M, primarily due to underestimation of CPP's Unit 2 & 5 overhaul projects. An assessment of U4 turbine generator

revealed the need for more extensive upgrades and/or repairs prior to return to service.

- The overrun from the CPP Major Overhaul project is partially offset by underruns in the transformer replacement and San Fernando Power Plant projects. The transformer replacement project is currently under spent by \$2.7M primarily due to delays in the fabrication, delivery and installation of the transformers. The first set was installed and now in service. The second set of transformers is not anticipated until next fiscal year due to manufacturing schedule delays. However, an initial assessment by Engineering of the spare transformers in stock has determined that they may be useable. Engineering is preparing them for use and installation.
- San Fernando Power Plant project has been delayed pending an assessment of the existing building, including powerhouse and generators. Restoration of Unit 1 delayed due to lack of engineering resources.

	Total Project Approved From
\$276.4M	Inception to FY25/26
\$249.7M	Total Project Estimates
\$70.8M	Projects Approved to Date
\$57.5M	Project Actuals to Date

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

 Develop a contingency plan to outsource the installation of the equipment in the event internal resources are not available.

Within Acceptable Variance

Exceeds Target



LADWP RATES METRIC - PSRP Transmission, Capital (Power)

RESPONSIBLE MANAGER: John Hormozi, Power Transmission & Distribution Division **H REPORTING PERIOD**: June 2018 **DEFINITION OF RATES METRIC**: Board Approved Annual Budget vs. Actual Expenditures For PSRP Transmission, Capital **TARGET & ACCEPTABLE VARIANCE (FY 17/18)**: Target = \$91,614.6K; Acceptable Variance = ± 15%

STATUS: Within Acceptable Variance

FYTD	Approved Budget	Actual	Varia	ance	Re-Estimate	PSRP Transmission, Capital
as of:	(\$ in K)	(\$ in K)	\$ in K	%		FY 17/18
Jul-17	7,634.5	3,934.0	(3,700.5)	-48.5%		
Aug-17	15,269.0	(3,758.0)	(19,027.0)	-124.6%		100000
Sep-17	22,903.6	(1,843.0)	(24,746.6)	-108.0%		80000
Oct-17	30,538.2	365.0	(30,173.2)	-98.8%	<u></u>	× 60000
Nov-17	38,172.8	16,208.0	(21,964.8)	-57.5%	-	5 40000
Dec-17	45,807.4	38,882.0	(6,925.4)	-15.1%		20000
Jan-18	53,442.0	39,146.0	(14,296.0)	-26.8%		20000
Feb-18	61,076.6	50,320.0	(10,756.6)	-17.6%		
Mar-18	68,711.1	61,224.0	(7,487.1)	-10.9%		-20000 11 AUS 589 00 10 10 10 10 10 10 10 10 10 10 10 10
Apr-18	76,345.6	60,449.0	(15,896.6)	-20.8%	-	
May-18	83,980.1	82,907.0	(1,073.1)	-1.3%		
Jun-18	91,614.6	102,464.0	10,849.4	11.8%		Actua
	Acceptabl	e Variance	±	15%	19	Target and Acceptable Variance

SOURCE OF DATA: FI 21212 (KPI # 01.03.01.10).

1. BACKGROUND / PURPOSE

 Expenditures for various Power System Reliability Program transmission capital projects. Includes overhead and underground transmission projects and annual improvements.

2. ACHIEVEMENTS / MILESTONES

- Construction on Kenter-Sunset DC Electrode Cable B began October 2017.
- 138-kV Fairfax-Gramercy Line 1 replacement placed in-service during 8/2017; Line 2 replacement completed in 3/2018.
- 138-kV Fairfax-Olympic Cable B replacement commenced in 3/2018.
- In 11/2017, awarded Engineer/Procure/Construct contract for Sylmar Ground Return Project Ocean Electrode.

3. PERFORMANCE / VARIANCE ANALYSIS

- Includes charges for work on Jobs O1373 (Sylmar Filter Replacement Project) & B1220 (Sylmar Ground Return System Replacement Project), which are 60% reimbursable by others. Incoming reimbursements have caused anomalies in reported net expenditures (including some months with negative expenditures, which also occurred in early FY 16/17).
- The underrun (not considering reimbursements) was primarily caused by significant delays in contract deliverables of designs and apparatus in Job O1373, Sylmar Filter Replacement (-\$20M), and Job B1220, Sylmar DC Electrode Replacement (-\$12M). This underrun was partially offset by the overrun in Job O1346, Construct New 230-kV Scattergood-Olympic Cable A (+\$15M), caused by the delay/shifting of FY16/17 work to FY17/18.

 On the other hand, reimbursements received were less than budgeted resulting in a net overrun of \$10.8M.
 \$35M and \$17M reimbursements were budgeted under Jobs O1373 and B1220 respectively. However, only
 \$22.1M and \$3.2M were received in these Jobs – some were from FY16/17 expenditures. LADWP invoices these utilities only after incurring documented expenses on these projects.

14

 FI 21212 includes Annual (perpetual) jobs, so a single FI Estimated Lifetime Expenditure does not apply.

Total	Project Approved From	
	Inception to FY25/26	\$1,465.0M
Pro	ojects Approved to Date	\$870.9M
	Project Actuals to Date	\$555.2M

Amounts include AFUDC but exclude REIMB.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

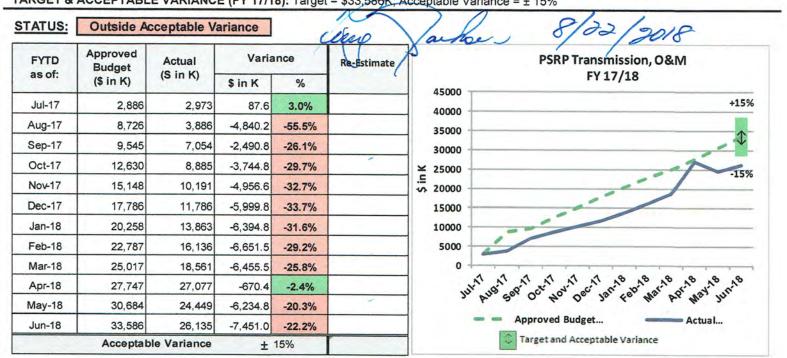
- Since significant YTD reimbursements for Sylmar jobs were actually for FY 16/17 expenditures, anticipate a similar pattern when estimating FY 18/19 cash flow.
- Continue with the underground portion of Sylmar Ground Electrode Project (Cable B) in parallel with the ocean portion to maintain schedule.

Needs Attention

LADWP RATES METRIC - *PSRP Transmission, O&M (Power)*

 RESPONSIBLE MANAGER: Terry Jackson, Power Transmission and Distribution
 REPORTING PERIOD: June 2018

 DEFINITION OF RATES METRIC: Board Approved Annual Budget vs. Actual Expenditures For PSRP Transmission, O&M
 TARGET & ACCEPTABLE VARIANCE (FY 17/18): Target = \$33,586K; Acceptable Variance = ± 15%



SOURCE OF DATA: FI 301-3132 (KPI # 01.03.01.11)

1. BACKGROUND / PURPOSE

To maintain facilities generally consisting of overhead and underground high voltage electric circuitry used to transport electricity in bulk quantities from generation facilities to distribution facilities over long distances for system reliability. Power Transmission & Distribution (PTD) operates and maintains overhead transmission lines extending over 6,400 circuit miles throughout the Western United States and another 120 miles of underground transmission in the Los Angeles area.

2. ACHIEVEMENTS / MILESTONES MET

 Power System Reliability Program (PSRP) aides in the hardening and replacement of critical infrastructure.

3. <u>PERFORMANCE / VARIANCE ANALYSIS</u> <u>& YEAR END PROJECTION</u>

 The underrun in this Functional Item (FI) is largely attributed to Year-To-Date (YTD) reimbursements received in Job B1280 (Maintenance of Sylmar Converter Station East). Approximately \$6.6M YTD reimbursements were received with a YTD aproved reimbursements of \$1.5M. The receipt of reimbursements resulted in a \$3.1M net underrun in this job. The underrun in this FI is also attributed to the \$5M underrun in Job B1232 (Overhead Transmission Line O&M) caused by crew being reassigned from O&M work to capital work. Budget for this Job was re-estimated to align with actual expenditures.

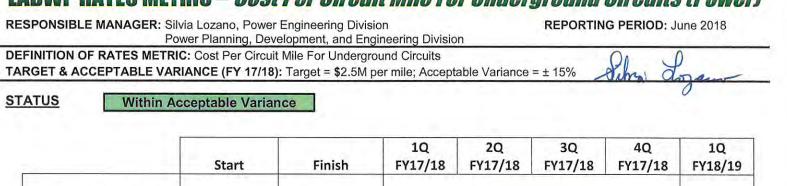
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4. MITIGATION PLAN AND / OR RECOMMENDATIONS

- PTD has and will continue to pursue a plan of action to remain on track and to stay within budget by:
 - Working with job managers to identify under/over variances in their jobs.
 - Discussing and reviewing jobs with job managers regarding re-estimates and forecasts throughout the fiscal year.
 - Job managers will shift available crew resources to meet projected targets.
 - Going forward, budget will be estimated to reflect anticipated annual expenditures.

Needs Attention

16 LADWP RATES METRIC – *Cost Per Circuit Mile For Underground Circuits (Power)*



3/9/2018

 Fairfax-Olympic Cable B
 3/12/2018
 7/14/2018

10/23/2017

SOURCE OF DATA: Job B1062 (KPI # 01.03.01.12)

1. BACKGROUND / PURPOSE

Fairfax-Gramercy Line 2

- This is a 5-year project, which began in fiscal year (FY) 16/17, to replace ten (10) aging 138-kV underground transmission circuits for power system reliability. The cost of the project includes the contract price to replace the ten (10) circuits by contractors and the cost of two stations per circuit installed by inhouse crew. The contract price for the circuit replacement varies from \$2.2 to \$4.5 million (M)/mile excluding contingencies, and the length of each circuit ranges from 2.5 to 5.9 miles. The ten (10) circuits included in this project are:
 - o Fairfax-Airport Line 1, 2.56 miles
 - o Fairfax-Airport Line 2, 2.52 miles
 - Fairfax-Gramercy Line 1, 5.59 miles (Completed in FY16/17)
 - Fairfax-Gramercy Line 2, 5.6 miles (Completed in FY17/18)
 - o Fairfax-Olympic Cable A, 5.89 miles
 - Fairfax-Olympic Cable B, 5.87 miles (On-going)
 - Scattergood-Airport Line 1, 5.05 miles
 - Scattergood-Airport Line 2, 5.04 miles
 - o Tarzana-Olympic Line 1A, 3.21 miles
 - o Tarzana-Olympic Line 1B, 3.21 miles

2. ACHIEVEMENTS / MILESTONES MET

- Fairfax-Gramercy Line 1 was completed in FY16/17 on June 1, 2017. Fairfax-Gramercy Line 2 was placed in service on March 9, 2018. Fairfax-Olympic Cable B work will be completed this FY but testing will occur in program year. (Note: Fairfax-Olympic Cable A was originally scheduled for replacement this FY but the failure of Cable B warranted the switch in replacement schedule).
- Replacement for Fairfax-Olympic Cable B started on March 12, 2018 with a revised estimated in-service date of July 14, 2018. The 2-week delay is a result of changing testing companies.

3. <u>PERFORMANCE / VARIANCE ANALYSIS</u> <u>& YEAR END PROJECTION</u>

	Types	Target	Actuals/ Trending Cost ²	Variance (%)	
FY16/17	Contract Cost	\$2.7M/mile1	\$2.6M/mile	-3.7%	
	Station Cost	1	\$0.6M/mile	-	
FY17/18	Contract Cost	CO CMARTIN	\$2.3M/mile ²	+12%	
(YTD)	Station Cost	\$2.5M/mile	\$0.5M/mile ²		

- \$2.7M/mile target was based on the total contract cost for the replacement of 10 circuits. It was reforecast to \$2.9M/mile due to the use of larger cable to increase the line operating capacity.
- Trending costs are costs incurred year-to-date while the circuit replacement is still on-going.
- Because the actual cost per circuit mile will only be available upon completion of the circuit replacement, which may not fall within the current fiscal year, "trending costs" are provided if the final actuals are not available.
- The actual cost per circuit mile may vary significantly depending on the circuits to be replaced and the need to use the contingency provisions of the contract.
- Currently, the cost for FY17/18 is trending at approximately \$2.8M/mile considering the Fairfax-Gramercy Line 2 will not be completed until July 14, 2018.
- Although the current trending cost/mile is higher than this FY's target, it is anticipated that the actual cost per mile will be within the acceptable variance of the re-forecasted target of \$2.9M/mile upon completion of all ten (10) circuits in 2021.

4. <u>MITIGATION PLAN AND / OR</u> <u>RECOMMENDATIONS</u>

There is no mitigation plan at this time.



LADWP RATES METRIC - PSRP Substation, Capital (Po

RESPONSIBLE MANAGER: Jeffrey Thornburg

REPORTING PERIOD: June 2018

17

Power Planning, Development, and Engineering Division DEFINITION OF RATES METRIC: Board Approved Annual Budget vs. Actual Expenditures For PSRP Substation, Capital TARGET & ACCEPTABLE VARIANCE (FY 17/18): Target = \$83,798K; Acceptable Variance = ± 15%

STATUS: Outside Acceptable Variance

FYTD	Approved Budget	Actual	Varia	ince	Re-Estimate	PSRP Substation, Capital FY 17/18
as of:	(\$ in K)	(S in K)	\$ in K	%	(\$ in K)	140000 1
Jul-17	6,983.1	6,369.0	-614.1	-8.8%		120000
Aug-17	13,966.2	14,631.0	664.8	4.8%		
Sep-17	20,949.3	21,968.8	1,019.5	4.9%		100000
Oct-17	27,932.4	29,403.0	1,470.6	5.3%	1	× 80000
Nov-17	34,915.6	38,137.0	3,221.4	9.2%		₩ 60000
Dec-17	41,898.8	47,360.0	5,461.2	13.0%		40000
Jan-18	48,882.0	55,636.0	6,754.0	13.8%		
Feb-18	55,865.2	66,344.0	10,478.8	18.8%		20000
Mar-18	62,848.4	77,362.0	14,513.6	23.1%		
Apr-18	69,831.6	90,709.0	20,877.4	29.9%		Jun Aug Sept Oct Nov Dechange Mar Apr Mar 19
May-18	76,814.8	102,557.0	25,742.2	33.5%		Approved Budget Actual.
Jun-18	83,797.9	118,027.0	34,229.1	40.8%		Target and Acceptable Variance
	Acceptabl	e Variance	±	15%	9.8%	

SOURCE OF DATA: FI 21195 (KPI # 01.03.01.13).

1. BACKGROUND / PURPOSE

 Substation life extension, expansions, upgrades and equipment replacements (transformers, circuit breakers, batteries, etc.) to improve substation reliability, availability and capacity.

2. ACHIEVEMENTS / MILESTONES

- Five (5) power banks replaced, FY 17/18.
- Three (3) spare load banks assembled, FY 17/18.
- Ten (10) 35kV circuit breakers replaced at Receiving Station (RS)-A, FY 17/18.
- One shunt reactor installed at RS-D, FY 17/18.
- Five (5) station batteries replaced, FY 17/18.
- RS-Q bus tie and RS-U bench/meter board replaced, FY 17/18.
- Ten (10) Distributing Station (DS) transformer banks replaced, FY 17/18.
- Twelve (12) 35k circuit breakers installed, FY 17/18.
- Completed approximately 120 35kV circuit breaker life extension jobs, FY 17/18.
- Fifteen (15) 4.8kV DS circuit breakers installed, FY 17/18.
- Upgraded Substation Automation System (SAS) in four (4) stations, FY 17/18.
- Issued approximately 200 engineering Construction Work Packages (CWPs) to improve reliability in substations, FY 17/18.

3. <u>PERFORMANCE / VARIANCE ANALYSIS & YEAR END</u> <u>PROJECTION</u>

 Power System elevated the priority of substation Power System Reliability Program (PRSP) jobs in an

Within Acceptable Variance

Outside Acceptable Variance

effort to prepare for summer 2018 maximum electric demand (peak load). This has resulted in significant cost overruns. Result is 40.8% variance for FY 17/18 (\$34M.)

- General Manager will meet with Council District 11 to discuss two possible sites for new DS-104 (date still to be determined).
- FI 211-95 includes Annual (perpetual) jobs, so single estimated lifetime expenditure does not apply.

1	Total Project Approved From	
	Inception to FY25/26	\$2,029.3M
	Project Approved to Date	\$1,166.0M
	Project Actuals to Date	\$1,034.0M

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

- Deferring work on RS-M Bank C and DS-104 until fiscal year 18/19.
- Convened bi-monthly substation PSRP coordination meetings with Planning, Engineering, Operations, and Construction/Maintenance
 - Divisions. Focus is to prioritize and complete all jobs necessary to avoid unplanned outages during summer 2018 and these expenditures are critical to that objective.
 - Continue to progress most other Substation PSRP jobs as resources allow. For FY 17/18, overall PSRP Capital variance was +13.6%.



LADWP RATES METRIC - PSRP Substation, O&M (Power)

RESPONSIBLE MANAGER: David Haerle, Power Construction & Maintenance

REPORTING PERIOD: June 2018

PSRP Substation, O&M FY 17/18

DEFINITION OF RATES METRIC: Budget Approved Annual Budget vs. Actual Expenditures For PSRP Substation, O&M TARGET & ACCEPTABLE VARIANCE (FY 17/18): Target = \$72,985K; Acceptable Variance = ± 15%

STATUS:	Within Ac	ceptable Va	riance			
FYTD	Approved Budget	Actual	Varia	ince	Re-Estimate	
as of:	(\$ in K)	(S in K)	\$ in K	%	Re-Estimate	9
Jul-17	6,082.10	4,646.0	-1,436.1	-23.6%		8
Aug-17	12,164.20	10,828.0	-1,336.2	-11.0%		7
Sep-17	18,246.30	15,845.0	-2,401.3	-13.2%		6
Oct-17	24,328.40	21,327.0	-3,001.4	-12.3%		¥ 5
Nov-17	30,410.50	26,153.0	-4,257.5	-14.0%		uş 4
Dec-17	36,492.60	31,572.0	-4,920.6	-13.5%		3
Jan-18	42,574.70	37,986.0	-4,588.7	-10.8%		2
Feb-18	48,656.80	43,299.0	-5,357.8	-11.0%		1
Mar-18	54,738.90	50,348.0	-4,390.9	-8.0%		
Apr-18	60,821.00	56,129.0	-4,692.0	-7.7%		
May-18	66,903.10	61,074.0	-5,829.1	-8.7%		
Jun-18	72,985.20	66,991.0	-5,994.2	-8.2%		
JUIPTO		ble Variance		-0.2%		

SOURCE OF DATA: FI 301-3201 (KPI # 01.03.01.14)

1. BACKGROUND / PURPOSE

Substation operations and maintenance (O&M) activities are a critical component in the Department's ability to provide continued safe and reliable power. This metric measures the planned vs. actual expenditures for O&M activities for Substation Operations in the Metro, West Los Angeles/South Los Angeles, and Valley areas, including the switching and maintenance of communication equipment.

2. ACHIEVEMENTS / MILESTONES MET

- See attached Supplemental Summary for the monthly breakdown of restorations and work completed.
- Industrial Station (IS) 1384: El Camino Shopping Center transformer replacement. In June, Electrical Station Maintenance (ESM) replaced the transformer. The station load was supplied via a hog wagon when the transformer failed. The station was de-energized, the hog wagon disconnected, the replaced transformer was connected and the station returned to service.
- Receiving Station (RS)-P (CAP 1D, 34.5kV Circuit Switcher) In June, ESM completed the installation of the 34.5kV Capacitor Circuit Switcher at RS-P. This was a complete like for like installation which

Within Acceptable Variance

included all 3 interrupters, gear boxes, all drive shafts, and switch operator.

Target and Acceptable Variance

H04.17

Approved Budget...

OCT

Jan 18

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2

Deci

Castaic Power Plant S230kV SF6 Circuit Breaker (CB) E-74 Replacement - In June, ESM completed the replacement of the 230kV E-74 circuit breaker. The CB failed during a switching operation in May. ESM replaced the CB with a spare in storage at the plant. On June 21, 2018, all acceptance and function testing was completed all the CB was returned to service. This work is 100% complete.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- Underspending continues largely due to the 27 Electrical Testers (ET) vacancies in Electric Station Maintenance, Station Test, and System Protection Groups.
- ESM currently has 51 Electrical Craft Helper (ECH) and Electrical Mechanic (EM) vacancies.
- In January, ESM hired 5 of the 9 approved ECH positions.
- ESM will benefit with additional support by utilizing Utility Pre-Craft Trainees (UPCT) alongside of the new ECH positions.
- In addition, underspending is caused by resources in ESM, System Protection, and Station Test Lab being diverted to support capital projects and other higher priority O&M work activities. The capital projects include Circuit Breaker Life Extension,

Exceeds Target Needs Attention

+15%

15%

May

Actual...

¹⁸

Transformers Life Extension, Vista Switch Replacement, and Station summer preparation work.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

- Re-estimates (reduction of approximately \$8.2M mainly in labor and labor allocations) were made in September and March.
- O&M work is delayed due to lack of resources. Underspending is expected to reduce when adequate staff is trained and hired. As the EM and ET that support this FI can only be hired after completing the corresponding training programs, it is a slow on-going process. EM is a four-year training program though the class size has increased. ESM competes with other sections to hire EMs. 11 EMs were hired in January 2018 and 11 more are expected to be hired in July. However, the EM hiring and class graduates will not affect this FI in a substantial manner for several years due to the multi-year training program and high attrition rate.
- As EMs are more challenging to fill, Power Construction & Maintenance (PCM) plans to revitalize the Battery Technician classification to perform the work. Once completed, PCM plans to hire Battery Technicians and additional ECHs in lieu of EMs, as well as additional administrative personnel. This program however is in the early planning stages, and likely will not affect this FI for several years.

ACHIEVEMENTS / MILESTONES MET

The following table details the monthly breakdown of Substation O&M activity, since JULY 2017.

	JULY 2017	AUG 2017	SEPT 2017	OCT 2017	NOV 2017	Dec-17	JAN 2018	FEB 2018	MAR 2018	APR 2018	MAY 2018	JUNE 2018	TOTAL
NO. OF RESTORATIONS OF	CUSTOME	R CIRCUIT	S:										
Receiving Stations (RS) Circuit Outages	45	55	44	31	25	45	51	34	45	46	28	57	506
Distributing Station (DS) Circuit Outages	97	90	78	67	53	89	93	54	83	142	94	142	1082
5-kV Circuit Grounds	42	47	59	51	32	52	49	23	57	41	28	33	514
NO. OF INSULATOR WASHIN	NGS:												
Generating Stations	1*	0	0	0	0	0	0	0	0	0	0	0	0
Receiving Stations	4	5	4	4	3	4	3	3	5	5	7	4	48
Distributing Stations	9	7	7	6	6	6	6	6	7	8	7	8	77

*Scattergood GS 230-kV equipment was washed in July 2017.

LADWP RATES METRIC – *PSRP Distribution, Capital (Power)*

RESPONSIBLE MANAGER: Sager Farraj,

REPORTING PERIOD: June 2018

19

SIF

Power Planning Development and Engineering Division DEFINITION OF RATES METRIC: Board Approved Annual Budget vs. Actual Expenditures For PSRP Distribution, Capital TARGET & ACCEPTABLE VARIANCE (FY 17/18): Target = \$263,615.1 K; Acceptable Variance = ± 15%

STATUS: Within Acceptable Variance

FYTD	Approved Budget	Actual	Varia	nce	Re-Estimate
as of:	(\$ in K)	(\$ in K)	\$ in K	%	
Jul-17	21,967.9	21,489.0	-478.9	-2.2%	1
Aug-17	43,935.8	46,056.0	2,120.2	4.8%	
Sep-17	65,903.8	68,280.0	2,376.2	3.6%	
Oct-17	87,871.7	89,578.0	1,706.3	1.9%	
Nov-17	109,839.6	107,345.0	-2,494.6	-2.3%	
Dec-17	131,807.5	128,772.0	-3,035.5	-2.3%	
Jan-18	153,775.4	151,773.0	-2,002.4	-1.3%	
-eb-18	175,743.3	173,308.0	-2,435.3	-1.4%	
Mar-18	197,711.3	199,906.0	2,194.7	1.1%	
Apr-18	219,679.1	222,336.0	2,656.9	1.2%	
/lay-18	241,647.1	240,664:0	-983.1	-0.4%	
Jun-18	263,615.1	279,475.0	15,859.9	6.0%	1

SOURCE OF DATA: FI 21190 (KPI # 01.03.01.15)

1. BACKGROUND / PURPOSE

- Table above is a summary of expenditures for all Power System Reliability Program distribution capital projects.
- Below is the approved budget % of four major functions:
 - Transformers: 9.4% (Jobs P6309 & P6394) 0
 - Poles: 30.1% (Job P6322) 0
 - Crossarms: 9.5% (Job P6318) 0
 - Cables: 16.3% (Job P6306) 0

2. ACHIEVEMENTS / MILESTONES MET

- The Distribution Reliability spent 106% of the budget through the month of June to complete the following:
 - New rack & bank installation RS-Rinaldi & 0 RS-B
 - 950 transformer installations 0
 - 3,018 pole replacements 0
 - 10,879 deteriorated crossarm replacements 0
 - 51.4 circuit-miles of cable replacements 0
 - 10,710 FIX-IT tickets (Jobs P6318, P6322, 0 P6394, P6306, P6309 & O1357)
 - Work continued on Owens Valley-0 overhead/underground installations & removals, asbestos removals, trouble ticket repairs & service restorations due to outages

PERFORMANCE / VARIANCE ANALYSIS 3.

Within Acceptable Variance

Outside Acceptable Variance

PSRP Distribution, Capital FY 17/18 50000 +15% 00000 50000 00000 -15% 50000 00000 50000 0 Sept octal 404 Dec 200 400 NO. Approved Budget... Actual... Target and Acceptable Variance

& YEAR END PROJECTION

- Variance through the month of June is \$15,859.9K, 6% over budget. This is due to Districts crews have been focusing on cable replacements, transformer installations, crossarm replacements, and pole replacements from the Power System Reliability Program distribution capital projects.
- The spike in June's variance is due to the yearend accrual for fiscal year end accounting.
- Dedicated crew for vault replacements is in place to focus on vault replacement backlog.

n	otal Project Approved From Inception to FY25/26	5,435.9M
	Projects Approved to	
	Date	2,304.2M
	roject Actuals to Date	2,142.1M

Note: The total project estimates cannot be calculated as this is an ongoing project.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

Budget actual is above approved due to Districts crews focusing on Power System Reliability Program distribution capital projects backlog. No mitigation plan is necessary.



RESPONSIBLE MANAGER Mike Barkhuri, Power Transmission and Distribution REPORTING PERIOD: June 2018

20

DEFINITION OF RATES METRIC: Board Approved Annual Budget vs. Actual Expenditures For PSRP Distribution, O&M TARGET & ACCEPTABLE VARIANCE (FY 17/18): Target = \$152,986K; Acceptable Variance = ± 15%

FYTD	Approved Budget	Actual	Varia	nce	Re-Estimate	PSRP Distribution, O&M
as of:	(\$ in K)	(\$ in K)	\$ in K	%		FY 17/18
Jul-17	11,285	10,207	-1,078.0	-9.6%		180000 +159
Aug-17	23,141	21,581	-1,560.1	-6.7%		160000
Sep-17	35,610	33,946	-1,664.2	-4.7%		140000
Oct-17	47,604	45,698	-1,906.4	-4.0%		⊥ ¹²⁰⁰⁰⁰
Nov-17	59,194	58,075	-1,119.0	-1.9%		
Dec-17	72,574	68,518	-4,055.8	-5.6%		80000 60000
Jan-18	85,542	81,229	-4,312.6	-5.0%		40000
Feb-18	98,387	93,201	-5,185.5	-5.3%		20000
Mar-18	112,598	108,854	-3,743.7	-3.3%		
Apr-18	126,300	124,108	-2,192.0	-1.7%		July August Seen Oct Nor Dec Jan 600 Mar 801 801 801 901 901 901 901 901 901 901 901 901 9
May-18	139,121	136,101	-3,019.9	-2.2%		
Jun-18	152,986	151,227	-1,759.0	-1.1%		Actual

SOURCE OF DATA: FI 301-3104 (KPI # 01.03.01.16)

1. BACKGROUND / PURPOSE

STATUS: Within Accentable Variance

To maintain Distribution-voltages of 34.5 kV and below on overhead and underground facilities which carries electricity from Receiving Stations (RS) and Distributing Stations (DS) to the customers for system reliability. There are over 6,800 miles of overhead and 3,597 miles of underground distribution facilities.

2. ACHIEVEMENTS / MILESTONES MET

Power System Reliability Program (PSRP) • aides in the hardening of the power system through the replacement of critical infrastructure.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

• This KPI was within its 15% threshold set for its goal.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

- Despite remaining within the acceptable budget variance for this FI, Power Transmission and Distribution will continue to pursue our plan of action to remain on track and stay within budget by:
 - Working with job managers to identify . under/over variances in their jobs.
 - Discussing and reviewing jobs with job 龖 managers regarding re-estimates and forecasts throughout the fiscal year.
 - Job managers will shift available crew resources to meet projected targets.

LADWP RATES/EQUITY METRIC – *Transformer Replacement (Power)*

RESPONSIBLE MANAGER: Mike Barkhuff, Power Transmission and Distribution EQUITY CORE CATEGORY: Water and Power Infrastructure Investment

REPORTING PERIOD: June 2018

DEFINITION OF RATES METRIC: Number of Transformers Replaced Against Plan TARGET & ACCEPTABLE VARIANCE (FY 17/18): Target = 800; Acceptable Variance = ± 15%

FYTD	Planned	Actual	Var	iance	Re-Estimate		Transformer Replacement
as of:	(No.)	(No.)	No.	%		1000	FY 17/18
Jul-17	100	63	-37	-37.0%		900 -	
Aug-17	180	130	-50	-27.8%		ب 800 –	/
Sep-17	250	211	-39	-15.6%		N 00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
Oct-17	350	272	-78	-22.3%		of 600 -	
Nov-17	400	360	-40	-10.0%		E 500 -	1
Dec-17	450	425	-25	-5.6%		1 400	
Jan-18	525	546	21	4.0%		2 200 -	1
Feb-18	600	603	3	0.5%		100 -	1
Mar-18	650	679	29	4.5%		0 +	· · · · · · · · · · · · · · · ·
Apr-18	700	777	77	11.0%		, ili	hus seprior how been sen ten her share her her ye
May-18	750	872	122	16.3%		5	
Jun-18	800	950	150	18.8%			Planned Actual
	Accepta	ble Variance	1	: 15%	1.00		Target and Acceptable Variance

SOURCE OF DATA: Jobs P6394/P6309 (KPI # 04.01.01.02)

1. BACKGROUND / PURPOSE

 Replace 800 distribution transformers to increase reliability and maintain compliance with California Public Utilities Commission (CPUC) General Order 165- Inspection Cycles for Electric Distribution Facilities. Power Transmission and Distribution (PTD) maintains more than 126,000 distribution transformers. This work is required to provide customers with reliable power and a better customer experience. Work is completed by Distribution Construction & Maintenance (DC&M) district or contract crews and is related to Power System Reliability Program (PSRP).

2. CRITERIA

 Transformer replacements are identified through DC&M inspection programs or due to transformer failures or are at risk of failing.

3. ACHIEVEMENTS / MILESTONES MET

• To date, the target was to replace 800 transformers and the current actual number of transformers replaced is 950.

4. <u>PERFORMANCE / VARIANCE ANALYSIS</u> <u>& YEAR END PROJECTION</u>

 The actual number of transformers replaced was over the 15% threshold set for the monthly target.

5. MITIGATION PLAN AND / OR RECOMMENDATIONS

• PTD crews will continue to focus on transformer replacements to mitigate outages during the summer months.

6. OUTREACH STRATEGY / PLAN

- PTD utilizes poster boards at job locations indicating why work is being performed.
- PTD conducts presentations at Community Council meetings describing PSRP work.
- PTD crew leaders notify customers in person when planning to access facilities for transformer replacements.



LADWP RATES/EQUITY METRIC - Pole Replacement (Power) **REPORTING PERIOD:** June 2018

RESPONSIBLE MANAGER: Mike Barkhuff, Power Transmission and Distribution

EQUITY CORE CATEGORY: Water and Power Infrastructure Investment

DEFINITION OF RATES METRIC: Number of Poles Replaced Against Plan

TARGET & ACCEPTABLE VARIANCE (FY 17/18): Target = 3,000; Acceptable Variance = ± 15%

STATUS: Within Acceptable Variance

FYTD	Planned	Actual	Var	iance	Re-Estimate	Pole Replacement
as of:	(No.)	(No.)	No.	%		FY 17/18
Jul-17	150	337	187	124.7%		4000 +15
Aug-17	250	667	417	166.8%		3500 -
Sep-17	500	936	436	87.2%		3000
Oct-17	750	1,141	391	52.1%		<u>8</u> 2500
Nov-17	1,000	1,339	339	33.9%		5 2000 -13,
Dec-17	1,250	1,608	358	28.6%		g 1500
Jan-18	1,650	1,803	153	9.3%		1000
Feb-18	1,900	2,121	221	11.6%		500
Mar-18	2,250	2,303	53	2.4%		0
Apr-18	2,500	2,611	111	4.4%		July provide 200 Det Nor Decri 201, 60, 18 1, 60, 18 1, 10, 18 1, 10, 10
May-18	2,750	2,941	191	6.9%		
Jun-18	3,000	3,018	18	0.6%		- Planned Actual
	Acceptal	ble Variance	+	: 15%		Target and Acceptable Variance

SOURCE OF DATA: Jobs P6322 (KPI # 04.01.01.03)

1. BACKGROUND / PURPOSE

Replace 3,000 deteriorated poles due to age or other damage. Power Transmission and Distribution (PTD) maintains approximately 321,000 poles in its system. These poles have an average life span of fifty years. These poles support switches, light fixtures, transformers, and underground cables transitioning to an overhead termination, communication cables, crossarms and conductors at different voltage levels. Work is completed by Distribution Construction & Maintenance (DC&M) district and contract crews. This work is required to maintain compliance with California Public Utilities Commission (CPUC) General Order 165- Inspection Cycles for Electric Distribution Facilities, and our Power System Reliability Program (PSRP).

2. CRITERIA

. Poles for replacement were identified through the DC&M Inspection Program.

3. ACHIEVEMENTS / MILESTONES MET

To date, the target was to replace 3,000 poles and the current actual number of poles replaced was 3,018.

4. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

The actual number of poles replaced was within the 15% threshold target.

5. MITIGATION PLAN AND / OR RECOMMENDATIONS

Monitoring and reducing the number of pole replacements throughout the fiscal year enabled PTD to stay within the acceptable range.

6. OUTREACH STRATEGY / PLAN

- PTD utilizes poster boards at job locations indicating why work was being performed.
- PTD conducts presentations at Community Council meetings describing PSRP work.
- PTD crew leaders notify customers in person when planning access to facilities for pole replacements.

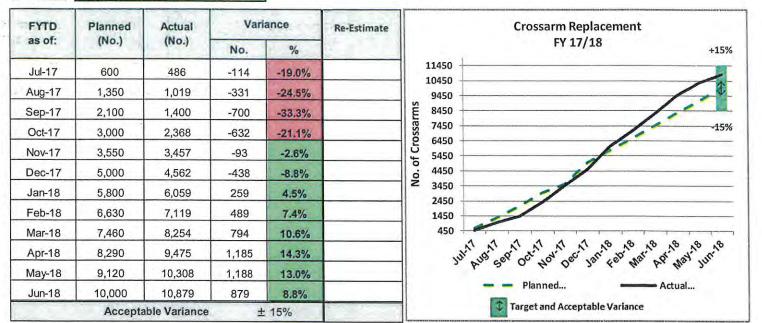
LADWP RATES METRIC - Cross arm Replacement (Power)

 RESPONSIBLE MANAGER
 Mike Barkhuff, Power Transmission and Distribution
 REPORTING PERIOD: June 2018

 DEFINITION OF RATES METRIC: Number Of Cross arms Replaced Against Plan
 Reporting Period: June 2018

TARGET & ACCEPTABLE VARIANCE (FY 17/18): Target = 10,000; Acceptable Variance = ± 15%

STATUS: Within Acceptable Variance



SOURCE OF DATA: Jobs P6318 (KPI #04.01.01.21)

1. BACKGROUND / PURPOSE

Replace 10,000 deteriorated cross arms due to . age or other damage. Power Transmission and Distribution (PTD) maintains approximately 321,000 poles that usually support one or more cross arms. These cross arms support conductors at different voltage levels. transformers, switches, light fixtures, communication cables, etc. Work is done by Distribution Construction & Maintenance (DCM) district and contract crews. This work is required to maintain compliance with California Public Utilities Commission (CPUC) General Order 165-Inspection Cycles for Electric Distribution Facilities, and our Power System Reliability Program (PSRP).

2. ACHIEVEMENTS / MILESTONES MET

 To date, the target was to replace 10,000 cross arms and the current actual number of cross arms replaced is 10,879.

3. <u>PERFORMANCE / VARIANCE ANALYSIS</u> <u>& YEAR END PROJECTION</u>

- The actual number of cross arms replaced was within the 15% threshold target.
- 100% of the replacements were due to cross arm age or other damage.
- PTD management is working with district personnel to ensure crews are focusing on replacement of cross arms as well as reviewing capital PSRP jobs to ensure that the work is accurately credited.

4. <u>MITIGATION PLAN AND / OR</u> <u>RECOMMENDATIONS</u>

 Monitoring and reducing the number of cross arm replacements at the end of the fiscal year enabled PTD to stay within the acceptable range.

Outside Acceptable Variance

LADWP RATES/EQUITY METRIC - Cable Replacement (Power)

REPORTING PERIOD: June 2018

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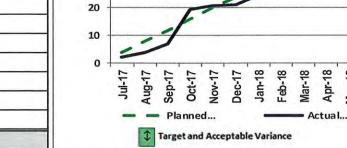
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RESPONSIBLE MANAGER: Sager Farraj, Power Planning Development and Engineering Division EQUITY CORE CATEGORY: Water & Power Infrastructure Investment

DEFINITION OF RATES METRIC: No. of Miles of Cable Replaced Against Plan TARGET & ACCEPTABLE VARIANCE (FY 17/18): Target = 48 miles; Acceptable Variance = ±15%

Within Acceptable Variance STATUS:

FYTD	Planned	Actual	Variance		Re-Estimate
as of:	(Mile)	(Mile)	Mile	%	
Jul-17	4.0	2.2	-1.8	-45.0%	
Aug-17	8.0	4.1	-3.9	-48.8%	
Sep-17	12.0	7.2	-4.8	-40.0%	
Oct-17	16.0	19.6	3.6	22.5%	
Nov-17	20.0	20.7	0.7	3.5%	
Dec-17	24.0	21.1	-2.9	-12.1%	
Jan-18	28.0	24.6	-3.4	-12.1%	
Feb-18	32.0	31.9	-0.1	-0.3%	
Mar-18	36.0	33.7	-2.3	-6.4%	
Apr-18	40.0	41.1	1.1	2.8%	
May-18	44.0	43.4	-0.6	-1.4%	
Jun-18	48.0	51.4	3.4	7.1%	
	Acceptab	le Variance	±	15%	



Cable Replacement, Capital FY 17/18

15%

-15%

Jun-18

Aav-18

SOURCE OF DATA: FI 21190, Job P6306 (KPI # 04.01.01.70)

1. NARRATIVE / BACKGROUND

Cable replacement of 4.8-kV and 34.5-kV cables for additional system reliability due to deterioration, overload, obsolescence and damage.

2. CRITERIA

- Frequency of failures
- Cable age
- Physical deteriorations: cracks, bulging

3. ACHIEVEMENTS

Through the month of June, Distribution Construction & Maintenance completed 51.4 circuit miles. The key performance goal is 48 circuit miles annually.

4. PERFORMANCE/VARIANCE ANALYSIS & YEAR END PROJECTION

Variance through th miles, 7% above ta been focusing on c

MITIGATION/RECOM 5.

Cable replacement is necessary.

6. OUTREACH STRATEGY / PLAN

- Neighborhood Council request for meeting on outages
- Available information on web site: http://prp.ladwp.com

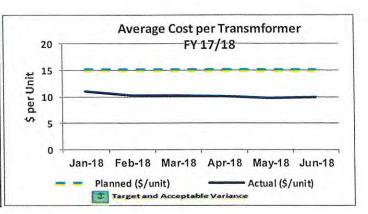
	of June is 3.4 circuit icts crews have	
•	cement backlog.	
MENDATI	ON	
t target me	et. No mitigation plan	
ance	Outside Acceptable Variance	Exceeds Targe

Outside Acceptable

25 LADWP RATES METRIC Average Unit Cost per Transformer (Power RESPONSIBLE MANAGER: William Herriott, Power Transmission and Distribution REPORTING PERIOD: June 2018

DEFINITION OF RATES METRIC: Average unit cost per transformer TARGET & ACCEPTABLE VARIANCE (FY 17/18): Target = \$15.2K per transformer; Acceptable Variance = ± 15%

STATUS:	Exc	Exceeds Target							Exceeds Target			
FYTD	Planned	Actual	Vari	ance	Re-Estimate							
as of:	(\$/unit)	(\$/unit)	\$	%	ne-Estimate							
Jan-18	15.2	11.0	(4.2)	-27.6%								
Feb-18	15.2	10.3	(4.9)	-32.2%								
Mar-18	15.2	10.3	(4.9)	-32.2%								
Apr-18	15.2	10.1	(5.1)	-33.6%								
May-18	15.2	9.8	(5,4)	-35.5%								
Jun-18	15.2	10.0	(5.2)	-34.2%								
	Accepta	ble Variance	4	15%								



SOURCE OF DATA: Jobs P6394/P6309 (KPI # 04.01.01.71)

1. BACKGROUND / PURPOSE

 Replace 800 distribution transformers to increase reliability and maintain compliance with California Public Utilities Commission (CPUC) General Order 165- Inspection Cycles for Electric Distribution Facilities. Power Transmission and Distribution set target is \$15.2K per unit cost of average replacement.

2. ACHIEVEMENTS / MILESTONES MET

To date, the target was to replace 800 . transformers and the current actual replacement is 950 transformers.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

The performance has exceeded target unit costs . expectations at -34.2%, well below the ±15% variance threshold.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

Although the actual cost per unit are below the target, PTD exceeded in achieving its annual goal of replacing 800 transformers by fiscal year end. The division will continue to monitor and prioritize replacements of both overhead and underground transformers through Distribution

Construction & Maintenance (DC&M) inspection program.

Within Acceptable Variance

LADWP RATES METRIC - Average Unit Cost per Pole (Power)

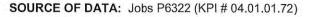
RESPONSIBLE MANAGER: William Herriott, Power Transmission and Distribution REPORTING PERIOD: June 2018

DEFINITION OF RATES METRIC: Average unit cost per pole

TARGET & ACCEPTABLE VARIANCE (FY 17/18): Target = \$27.7K per pole; Acceptable Variance = ± 15%

STATUS: Outside Acceptable Variance

Planned	Actual	Vari	ance	Re-Estimate
(\$/unit)	(\$/unit)	\$	%	Inc Estimate
Jan-18 27.7		(1.7)	-6.1%	
27.7	25.1	(2.6)	-9.4%	
27.7	26.4	(1.3)	-4.7%	
27.7	26.9	(0.8)	-2.9%	
27.7	27.0	27.0 (0,7)		
27.7	35.0	7.3	26.4%	
	(\$/unit) 27.7 27.7 27.7 27.7 27.7 27.7	(\$/unit) (\$/unit) 27.7 26.0 27.7 25.1 27.7 26.4 27.7 26.9 27.7 27.0	Hammed (\$/unit) Hetual (\$/unit) Hetual (\$/unit) 27.7 26.0 (1.7) 27.7 25.1 (2.6) 27.7 26.4 (1.3) 27.7 26.9 (0.8) 27.7 27.0 (0.7)	(\$/unit) (\$/unit) \$ % 27.7 26.0 (1.7) -6.1% 27.7 25.1 (2.6) -9.4% 27.7 26.4 (1.3) -4.7% 27.7 26.9 (0.8) -2.9% 27.7 27.0 (0.7) -2.5%



1. BACKGROUND / PURPOSE

 Replace 3,000 deteriorated poles due to age or other damage. Power Transmission and Distribution (PTD) maintains approximately 321,000 poles in its system. These poles have an average life span of fifty years. These poles support switches, light fixtures, transformers, and underground cables transitioning to an overhead termination, communication cables, crossarms and conductors at different voltage levels. PTD has a target replacement cost of \$27.7K per unit.

2. ACHIEVEMENTS / MILESTONES MET

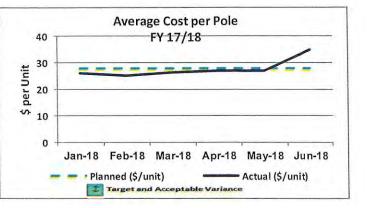
 Current to date target was a replacement of 3,000 power poles and PTD has completed the replacement of 3,018 power poles.

3. <u>PERFORMANCE / VARIANCE ANALYSIS</u> <u>& YEAR END PROJECTION</u>

• The spike in variance is a result of year-end accruals of contractual payments totaling approximately \$15.5M for the month of June 2018. The average cost per pole over the 6-month period is \$27.7, which is right on target.

4. <u>MITIGATION PLAN AND / OR</u> <u>RECOMMENDATIONS</u>

None at this time.



26

LADWP BATES METRIC – *Average Unit Cost per Crossarm (Power)* RESPONSIBLE MANAGER: William Heriot, Yovie Transmission and Distribution REPORTING PERIOD: June 2018

27

DEFINITION OF RATES METRIC: Average unit cost per crossarm TARGET & ACCEPTABLE VARIANCE (FY 17/18): Target = \$2.5K per crossarm; Acceptable Variance = ± 15%

TATUS:	Exc	eeds Targe	et			
FYTD	Planned	Actual	Vari	ance	Re-Estimate	
as of:	(\$/unit)	(\$/unit)	\$	%	ne comine	3
Jan-18	2.5	2.0	(0.5)	-20.0%		ţi 2
Feb-18	2.5	1.9	(0.6)	-24.0%		\$ per Unit
Mar-18	2.5	1.9	(0.6)	-24.0%		۵ ۱ ۵۶
Apr-18	2.5	2.0	(0.5)	-20.0%		
May-18	2.5	2.1	(0.4)	-16.0%		0
Jun-18	2.5	2.0	(0.5)	-20.0%		
	Accepta	ble Variance	+	15%		

SOURCE OF DATA: Jobs P6318 (KPI # 04.01.01.73)

1. BACKGROUND / PURPOSE

Replace 10,000 deteriorated crossarms due to age or other damage. PTD maintains approximately 321,000 poles that usually support one or more crossarms. These crossarms support conductors at different voltage levels, transformers, switches, light fixtures, communication cables, etc. PTD has a target replacement cost of \$2.5K per unit.

2. ACHIEVEMENTS / MILESTONES MET

. The current month's target year to date was replacement of 10,000 crossarms and the actual replacements total 10,879 per crossarms metric.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

PTD is currently exceeding target expectations at \$2.0K per unit which is -20.0% below target. Some of these were multiple arms replaced on the same facility which lowered the cost per unit and exceeds the target of the acceptable variance of ± 15%. As more jobs are completed with single arm replacements at each facility or hard to access facilities the cost will increase.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

None at this time.

Average Cost per Crossarm FY 17/18 n-18 Feb-18 Mar-18 Apr-18 May-18 Jun-18 Planned (\$/unit) - Actual (\$/unit) Target and Acceptable Variance

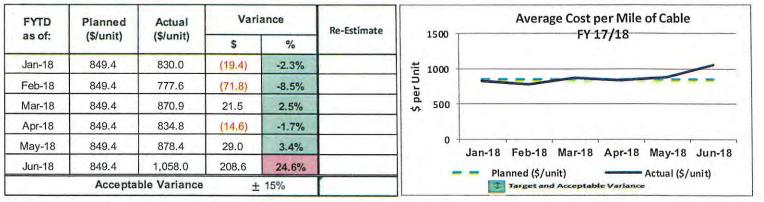
28 LADWP RATES METRIC - Average Unit Cost per Mile of Cable (Power)

RESPONSIBLE MANAGER: William Hemot, Power Transmission and Distribution

REPORTING PERIOD: June 2018

DEFINITION OF RATES METRIC: Average unit cost per mile of cable replaced TARGET & ACCEPTABLE VARIANCE (FY 17/18): Target = \$849.4K per mile of cable replaced; Acceptable Variance = ± 15%

STATUS: **Outside Acceptable Variance**



SOURCE OF DATA: Jobs P6306 (KPI # 04.01.01.74)

BACKGROUND / PURPOSE

Replace 48 miles of 4.8KV and 34.5KV underground (4.8-kV and 34.5-kV) distribution cables that require periodic upgrading because of load growth, failures due to storm damage, accidents, inherent defects, deterioration, age or advancements in materials and in power distribution techniques. PTD has a target replacement cost of \$849.4K per mile.

2. ACHIEVEMENTS / MILESTONES MET

The current months target was a year to date replacement of 48 miles of cable. The actual cable replacement totals 51.4 miles.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

The spike in variance is a result of year-end accruals of contractual payments totaling approximately \$6M for the month of June 2018. The average cost per mile of cable over the 6month period is \$874.9K, which is +3% of the monthly target.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

None at this time.

Water System

LADWP RATES METRIC - NEW DISTRIBUTION I FRASTRUCTUR

RESPONSIBLE MANAGER: Breonia Lindsey/Sandra Foster

REPORTING PERIOD: June 2018

E CREWS II

New Distribution Infrastructure Employees FY 17/18

29

+0% £

0%

Actual

DEFINITION OF RATES METRIC: Number of employees for new crews dedicated to distribution infrastructure as compared to plan. TARGET & ACCEPTABLE VARIANCE (FY 17/18): 32 employees

60

50

40

30

20

10

n

AUGAT

500

of Employees Hired

FYTD	Approved Budget /	Actual	Variance		Re-Estimate
as of:	Planned		#Emp	%	(If Applicable)
Jul-17	0	0	0		
Aug-17	0	0	0		
Sep-17	0	0	0		
Oct-17	8	11	3	37.5%	
Nov-17	8	24	16	200.0%	
Dec-17	16	24	8	50.0%	
Jan-18	16	26	10	62.5%	
Feb-18	20	26	6	30.0%	
Mar-18	20	49	29	145.0%	
Apr-18	24	49	25	104.2%	
May-18	24	49	25	104.2%	
Jun-18	32	49	17	53.1%	



1. BACKGROUND / PURPOSE

Distribution infrastructure crews are necessary to meet mainline replacement and other infrastructure goals.

*The target is four crews totaling 32 employees.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

HOUNT

Approved Budget / Planned

Decal Jan 18

C Target and Acceptable Variance

Mar-18 No 400

octant

The division has exceeded its fiscal year goal of hiring 32 new employees for distribution infrastructure crews.

2. ACHIEVEMENTS/MILESTONES MET

No new hires in June 2018. However, the division is in the process of hiring Water Utility Workers, Maintenance Construction Helpers and Equipment Operators for the Mainline Replacement Program and some are expected to start in July.

4. MITIGATION PLAN AND/OR RECOMMENDATIONS

The division is pushing hard to achieve its hiring plan from the previous and current fiscal years in order to meet increasing mainline replacement goals.



30 LADWP RATES METRIC – WATER SUPPLY COST BUDGET VS ACTUAL-**CAPITAL** (Water) mall **RESPONSIBLE MANAGER: Dora Maese**

REPORTING PERIOD: June 2018

DEFINITION OF RATES METRIC: Board approved annual budget vs actual expenditures. TARGET & ACCEPTABLE VARIANCE (FY 16/17): \$179,593K , 10 percent

STATUS: Outside Acceptable Variance

FYTD	Approved Budget /	Actual	Varia	ance	Re-Estimate	Water Supply Cost - Capital
as of:	Planned	riotuui	Unit or \$	%	(If Applicable)	FY 17/18
Jul-17	5,485	5,504	19	0.3%		180000 +:
Aug-17	13,133	13,133	0	0.0%		160000
Sep-17	25,669	24,529	-1,140	-4.4%		140000
Oct-17	41,654	31,362	-10,292	-24.7%		g 120000
Nov-17	53,622	36,321	-17,301	-32.3%		F 100000
Dec-17	66,836	40,220	-26,616	-39.8%		5 80000 60000
Jan-18	79,190	49,179	-30,011	-37.9%		40000
Feb-18	95,846	55,124	-40,722	-42.5%		20000
Mar-18	110,151	60,583	-49,568	-45.0%		0
Apr-18	123,427	65,160	-58,267	-47.2%		Jul Aught Sep Oct Nor Dec Jan 6 30 Mar Apr Nay Jun
May-18	143,185	91,143	-52,042	-36.3%		
Jun-18	160,725	97,488	-63,237	-39.3%		Approved Budget / Planned - Actual
- 1 5.W	Acceptabl	e Variance	±	10%	10	Target and Acceptable Variance

SOURCE OF DATA: Fls 22130, 22140, 22150, 23150, 24315, 24318, and 28204.

1. BACKGROUND / PURPOSE

Water supply costs include both current supply of water to our customers and development of future supplies necessary to make more resilient and reliable source of water.

2. ACHIEVEMENTS / MILESTONES MET

- Executed an MOA with LASAN and LAWA for . the design of an Advanced Water Purification Facility at Hyperion on July 11, 2018. Proposals for the Design-Build of the AWPF were received on July 19, 2018.
- Executed MOA with LASAN for the Initial Phase of the Groundwater Replenishment Project in July 2018.
- Machado Lake Phase 1 is scheduled for completion in October 2018.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

Storm water capture was under budget at year end due to delays in projects which rely significantly on the schedule of partners.

- Water conservation rebate was decreased in the year, in part because of the increase precipitation.
- Grant Lake Modification Project was deferred for reconsideration.
- LA Aqueduct forces focused on O&M work due to high water run-off from prior year snow fall.
- Recycled Water (RW) expenditures were within 4% of budget with final payment of \$22 million to Bureau of Sanitation of the Machado Lake Pipeline Project.
- The overall RW expenditures were lower than the Rate Case due to re-evaluation of the Groundwater Recharge Project.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

Water System is managing the costs and closely monitoring evolving regulations regarding direct and indirect potable re-use.

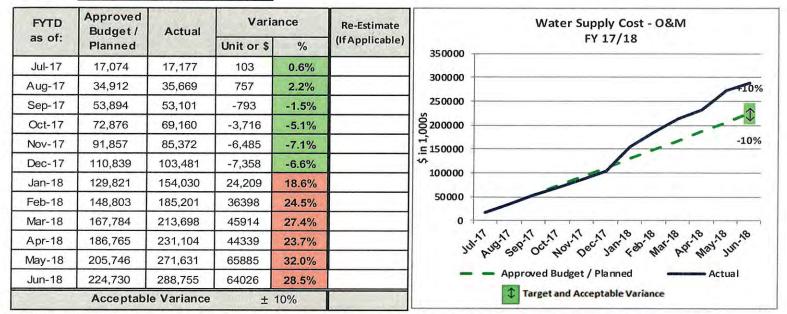
LADWP RATES METRIC – WATER SUPPLY COSTS BUDGET VS ACTUAL-0&M (Water)

REPORTING PERIOD: June 2018

DEFINITION OF RATES METRIC: Board approved annual budget vs actual expenditures. TARGET & ACCEPTABLE VARIANCE (FY 16/17): \$224,729.5K , 10 percent

STATUS: Outside Acceptable Variance

RESPONSIBLE MANAGER: Dora Maese



SOURCE OF DATA: FIs 3012224, 3022001, 3022005, 3022015, 3022025, 3022035, 3022037, 3051000, 3052000, 3112009, 3112200, 3122240, 3222507, 4013005, 4053010, and 4092023.

1. BACKGROUND / PURPOSE

 Water supply costs include both current supply of water to our customers and development of future supplies necessary to make more resilient and reliable source of water.

3. <u>PERFORMANCE / VARIANCE ANALYSIS</u> <u>& YEAR END PROJECTION</u>

- The variance is due to an increase in payments to the Metropolitan Water District for purchased water. Additional purchased water was needed, due to less water deliveries from the Los Angeles Aqueduct.
- Exceedance is due to inclusion of cost of Purchased Water (PW), which takes up over 60% of Water Supply O&M.

2. ACHIEVEMENTS / MILESTONES MET

 The City met the Mayor's Executive Direct No. 5 conservation goals of reducing dependency on imported water supply in the spring of 2016 and achieved the 104 GPCD target by January 2017.

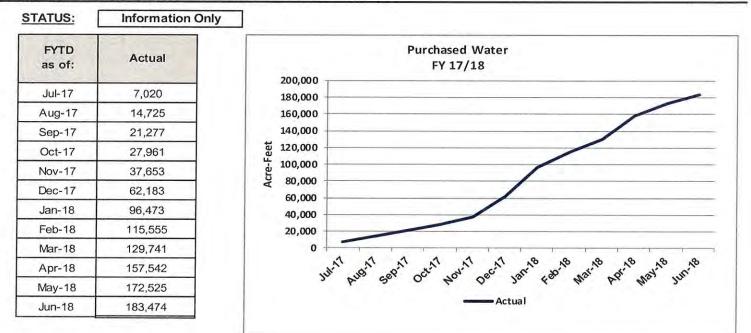
4. <u>MITIGATION PLAN AND / OR</u> <u>RECOMMENDATIONS</u>

Continue on going work as planned.

LADWP RATES METRIC – Purchased Water (Water) RESPONSIBLE MANAGER: Dora Maese MM & MMO

REPORTING PERIOD: June 2018

DEFINITION OF RATES METRIC: Annual quantity of purchased water in acre-feet (AF). Information only. TARGET & ACCEPTABLE VARIANCE (FY 16/17): N/A - for information only



SOURCE OF DATA: Monthly Metropolitan Water District invoices.

1. BACKGROUND / PURPOSE

- Purchased water from Metropolitan Water . District is an important source of water for our overall water supply portfolio and makes it more resilient.
- The Mayor's long term plan is to reduce dependency on purchased water supply.

2. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- During the summer months, the Water System maximized water deliveries from the Los Angeles Aqueduct (LAA) in the beginning of the fiscal year. This reduced the amount of purchased water.
- The amount of purchased water increased in the second half of the fiscal year due to less water deliveries from the LAA. Drier weather conditions have resulted in a lower than average snowpack during this year's rain season.

Additionally In January, the Filtration Plant was . shut down due to routine maintenance which contributed to the increase in purchased water.

3. MITIGATION PLAN AND / OR RECOMMENDATIONS

- As of April 1st, 2018 the overall weighted average for the Owens River Basin snowpack was at 66% of normal.
- 20% conservation has reduced the overall water use, minimizing purchased water.
- San Fernando Basin groundwater production has been increased to mitigate total purchased water numbers.

LADWP RATES METRIC - RECYCLED WATER DELIVERED (Water)

RESPONSIBLE MANAGER: William T. Van Wagoner

REPORTING PERIOD: June 2018

DEFINITION OF RATES METRIC: Annual quantity of recycled water delivered in acre-feet (AF) against plan. TARGET & ACCEPTABLE VARIANCE (Fiscal Year FY 17/18): 12,000 AF, 10%

STATUS: Outside Acceptable Variance

FYTD	Approved Budget /	Actual	Var	lance	Re-Estimate
as of:	Planned	C. And and	AF	%	(If Applicable)
Jul-17	1,000	977	-23	-2.3%	
Aug-17	2,000	2,013	13	0.7%	
Sep-17	3,000	2,886	-114	-3.8%	1
Oct-17	4,000	3,773	-227	-5.7%	
Nov-17	5,000	4,605	-395	-7.9%	
Dec-17	6,000	5,530	-470	-7.8%	
Jan-18	7,000	5,945	-1055	-15.1%	
Feb-18	8,000	6,535	-1465	-18.3%	
Mar-18	9,000	7,110	-1890	-21.0%	
Apr-18	10,000	7,595	-2405	-24.1%	
May-18	11,000	8,521	-2479	-22.5%	
Jun-18	12,000	9,778	-2222	-18.5%	

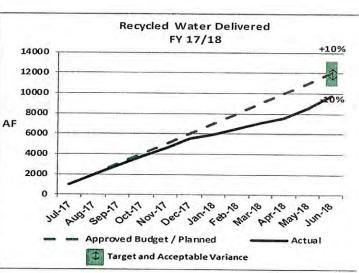
SOURCE OF DATA: Customer Recycled Water Meter Reads

1. BACKGROUND / PURPOSE

 Recycled water is one of the local supply strategies to meet the Mayor's Sustainable City pLAn to reduce dependency on imported water.

2. ACHIEVEMENTS / MILESTONES MET

- Delivered 9,711 AF of recycled water for FY 17/18 that is approximately 19% below the planned goal.
- In August 2017, the North Hollywood Water Recycling Project welcomed its first customer, the Los Angeles Department of Transportation, and its Chandler Bike Path in North Hollywood, which will use 6 acre-feet of recycled water per year for irrigation.
- In January 2018, the Los Angeles State Historic Park recycled water service was permanently turned on. This site will use 49 acre-feet of recycled water per year for irrigation.
- In February 2018, Warner Brothers Studio Facilities recycled water service was turned on. This site will use 2.5 acre-feet of recycled water per year for irrigation.
- In March 2018, Google Spruce Goose cooling tower recycled water service was turned on. This site will use 10 acre-feet of recycled water per year for their cooling tower.
- In March 2018, Woodbury University recycled water service was turned on. This site will use 39 acre-feet of recycled water per year for irrigation.



- In April 2018, Playa Vista Cleo and Playa Vista Mason recycled water services were turned on. These sites will each use 2 acre-feet of recycled water per year for irrigation.
- In May 2018, Google Spruce Goose irrigation recycled water service was turned on. This site will use 4 acre-feet of recycled water per year for their cooling tower.

3. <u>PERFORMANCE / VARIANCE ANALYSIS</u> <u>& YEAR END PROJECTION</u>

- Terminal Island Water Reclamation Plant owned by LA Sanitation was out of commission due to software migration and testing in July and August. Partial operation resumed from September through December with deliveries peaking at 6 MGD. The flow has continued to fluctuate in 2018 due to testing, maintenance, and electrical issues.
- Major customer (Dominguez Gap Seawater Intrusion Barrier) was unable to consistently take water due to infrastructure failures.
- Year-end delivery is 9,778 AF which is below the acceptable variance.
- 8 new recycled water sites were connected in the year.

4. <u>MITIGATION PLAN AND / OR</u> <u>RECOMMENDATIONS</u>

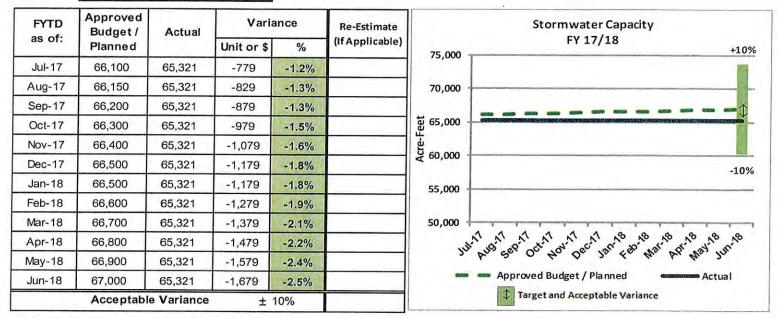
Continue to connect new recycled water customers where recycled water is available and can be supplied at a reasonable cost.

LADWP RATES METRIC - STORMWATER CAPACITY (Water) RESPONSIBLE MANAGER: David Pettijohn mo

REPORTING PERIOD: June 2018

DEFINITION OF RATES METRIC: Stormwater system capacity milestones in acre-feet (AF) against plan. TARGET & ACCEPTABLE VARIANCE (FY 17/18): 67,000 AFY; 10% variance

STATUS: Within Acceptable Variance



SOURCE OF DATA: Summary of Major Stormwater Capture Projects Report

1. BACKGROUND / PURPOSE

- Projects to meet the Mayor's Sustainability pLAn, 2015 Urban Water Management Plan and LADWP's Stormwater Capture M aster Plan.
- Replenishment of the San Fernando 0 Groundwater Basin is vital to sustain the long-term native safe yield of the City's local groundwater supply.

2. ACHIEVEMENTS / MILESTONES MET

- Water system has several projects in design/construction. These projects include:
 - Tujunga Spreading Grounds (8,000 AFY) is 52% complete
 - Van Nuys Boulevard Great Street (95 AFY) finalizing 100% construction documents and draft monitoring plan in progress.
 - Lankershim Boulevard Great Street (105 AFY) development of 30% construction documents in progress.

- San Fernando Regional Park Stormwater Capture Project (200 AFY) design/planning is in progress.
- Water system is finalizing several agreements, which will add more projects to the queue. These projects include:
 - Silver Lake Reservoir Stormwater Capture Project (159 AFY)
 - Bradley Green Alley (5.5 AFY)
 - Mid Valley Intergenerational Multi-0 Purpose Center (33 AFY)

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- On target.
- 4. MITIGATION PLAN AND / OR RECOMMENDATIONS
 - Continue on going work as planned.

Outside Acceptable Variance

Exceeds Target

35 IMP RATES METRIC. - ANNUAL GROUNDWATER PRODUCTION CEN miladiaghani **BASIN (Water)**

RESPONSIBLE MANAGER: Steven R. Cole Jor SC

REPORTING PERIOD: June 2018

Groundwater Production Central Basin FY 17/18

DEFINITION OF RATES METRIC: Annual groundwater production in the Central Basin in acre-feet (AF) against the plan. Information only TARGET & ACCEPTABLE VARIANCE (FY17/18): N/A for information only.

1.2

1

0.8

0.6

Å_{0.4}

0.2

0

STATUS:	Information Only
FYTD as of:	Actual
Jul-17	0
Aug-17	0
Sep-17	0
Oct-17	0
Nov-17	0
Dec-17	0
Jan-18	0
Feb-18	0
Mar-18	0
Apr-18	0
May-18	0
Jun-18	0

SOURCE OF DATA: Well Metered Reads

1. BACKGROUND / PURPOSE

- City of Los Angeles water rights in Central . Basin is 16,546 AF/Y.
- Pumping goal is set at 9,668 AF (58% of water rights), due to limited groundwater pumping and distribution capacity.
- Pumping Central Basin groundwater can . reduce purchases of imported water at a cost less than \$400 per AF, saving nearly \$600 per AF as compared with Tier 1 treated water purchased from MWD.

2. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- Manhattan Well Field was turned off on February 27, 2017 to maximize the usage of Aqueduct water. This well field remains off due to construction activities at the well site.
- The 99th St Well Field was turned off on May 16, 2016 due to water guality issues related to elevated levels of naturally occurring iron and manganese in the Watts and Green Meadows areas. The discoloration issue has been closed. However, the wells will remain off line until the new chloramination station and new

iron/manganese filtration removal systems are constructed.

Mar.18

Feb Jan Actual

3. MITIGATION PLAN AND / OR RECOMMENDATIONS

The project to construct iron/manganese filtration removal systems for the 99th St Well Field is currently in the design phase. The anticipated in-service date is mid-2020.

Within Acceptable Variance

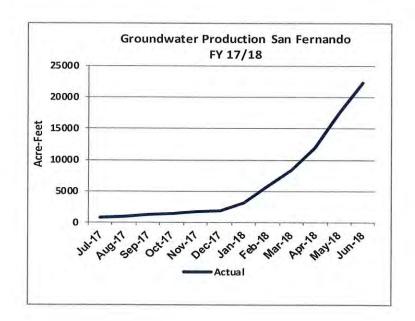
LADWP RATES METRIC – ANNUAL GROUNDWATER PRODUCTION SAN FERNANDO (Water)

RESPONSIBLE MANAGER: Steven R. Cole

REPORTING PERIOD: June 2018

DEFINITION OF RATES METRIC: Annual groundwater production in the San Fernando in acre-feet (AF) against the plan. Information only. **TARGET & ACCEPTABLE VARIANCE (FY 17/18):** N/A for information only.

STATUS: [Information Only
FYTD as of:	Actual
Jul-17	756
Aug-17	997
Sep-17	1,223
Oct-17	1,475
Nov-17	1,665
Dec-17	1,862
Jan-18	3,160
Feb-18	5,727
Mar-18	8,307
Apr-18	11,870
May-18	17,545
Jun-18	22,259



SOURCE OF DATA: Well Metered Reads

1. BACKGROUND / PURPOSE

- City of Los Angeles water rights in San Fernando Basin is 87,000 AF
- Pumping goal is set at 65,132 AF is based on groundwater quality and its depth.

2. <u>PERFORMANCE / VARIANCE ANALYSIS</u> <u>& YEAR END PROJECTION</u>

- As of February 2017, the groundwater well production is based on maximizing the usage of Aqueduct water and operational need.
- Started on January 2018, groundwater production was increased to meet demands and to minimize MWD purchase

3. <u>MITIGATION PLAN AND / OR</u> <u>RECOMMENDATIONS</u>

 Continue to use San Fernando Basin groundwater production as appropriate to reduce dependency on purchased water supply.

LADWP RATES METRIC – LA AQUEDUCT BUDGET VS ACTUAL - CAPITAL (Water)

REPORTING PERIOD: June 2018

37

DEFINITION OF RATES METRIC: Board approved annual budget vs actual expenditures. TARGET & ACCEPTABLE VARIANCE (FY 17/18): \$31,667K, 10 percent

STATUS: Outside Acceptable Variance

RESPONSIBLE MANAGER: Daniel Raftevold

FYTD	Approved Budget /	Actual	Vari	iance	Re-Estimate		LA Aqueduct Budget vs Actual - Capital
as of:	Planned	Actual	\$	%	(If Applicable)	40000 -	FY 17/18
Jul-17	1,740	1,759	19	1.1%		35000 -	+10%
Aug-17	3,777	3,777	0	0.0%		30000	Ĵ.
Sep-17	7,727	9,438	1,711	22.1%			1
Oct-17	12,088	11,789	-299	-2.5%		S 25000 -	-10%
Nov-17	13,553	13,146	-407	-3.0%		1 20000 -	
Dec-17	15,018	14,035	-983	-6.5%		بت بۍ 15000 –	
Jan-18	16,483	15,409	-1074	-6.5%		10000	6
Feb-18	17,948	16,540	-1408	-7.8%		5000	
Mar-18	19,413	17,747	-1666	-8.6%		0 +	
Apr-18	20,878	18426	-2452	-11.7%		UN'	AUST GERT OCK NON DEC' JAM'S NO NO NO NO JUN'S
May-18	26,269	19433	-6836	-26.0%		3	
Jun-18	31,667	20883	-10784	-34.1%		-	- Approved Budget / Planned Actual
	Acceptabl	e Variance	±	10%			Target and Acceptable Variance

SOURCE OF DATA: Fls 22130, 22140, and 22150.

1. BACKGROUND / PURPOSE

 The Los Angeles Aqueduct is an important source of non-purchased water. During times of low flow in the Aqueduct, infrastructure projects are completed (this cannot be done during high flow periods).

2. ACHIEVEMENTS / MILESTONES MET

 Southern District crews completed the initial phase of the Maclay Highline Project (reinstall, refurbishment, and rehabilitation of the tunnel for water spreading activities). This includes the installation of 1500 feet of piping, and the repair of collapsed sections of the tunnel.

3. <u>PERFORMANCE / VARIANCE ANALYSIS</u> <u>& YEAR END PROJECTION</u>

 The Maclay Highline Project and capital flood mitigation (ex. replacing infrastructure such as flumes) in the Owens Valley were the emphasis this fiscal year. Delays in the Grant Lake Spillway Project left this item below budget at fiscal year-end.

4. <u>MITIGATION PLAN AND / OR</u> <u>RECOMMENDATIONS</u>

- Crews focused on the Maclay Highline, and capital flood mitigation and repairs due to the intense run-off early in the fiscal year.
- Planned capital work, including LA Aqueduct 1 sag pipe recoating and pier replacement, as well as Mojave Yard Improvements were completed later in the fiscal year.
- Due to high runoff LAA Capital was low for the fiscal year as work was shifted to take advantage of the record runoff and mitigate potential damage due to flooding.

Within Acceptable Variance

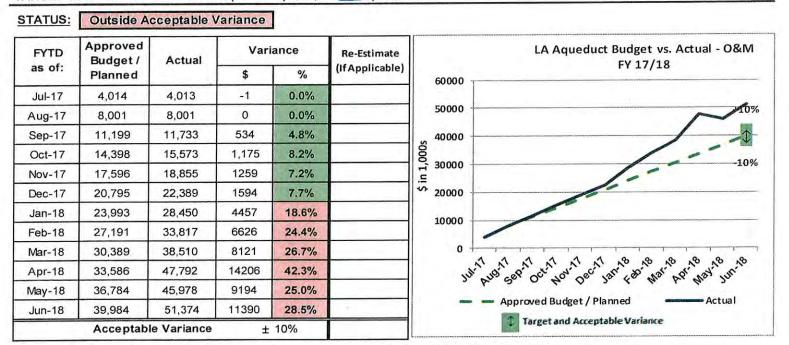


LADWP RATES METRIC - LA AQUEDUCT BUDGET VS ACTUAL - 0&M (Water)

(

REPORTING PERIOD: June 2018

DEFINITION OF RATES METRIC: Board approved annual budget vs actual expenditures. TARGET & ACCEPTABLE VARIANCE (FY 17/18): \$39,984K, 10 percent



SOURCE OF DATA: FIs 3022001, 3022005, 3022015, 3022025, 3022035, 3112009, 3222507, 4013005, and 4092023.

1. BACKGROUND / PURPOSE

RESPONSIBLE MANAGER: Daniel Raftevold

 The Los Angeles Aqueduct is an important source of non-purchased water. The 1st 6 months of this fiscal year saw O&M expenditures in-line with budgeted levels, including flood avoidance/water spreading activities.

2. ACHIEVEMENTS / MILESTONES MET

 Seasonal work to protect infrastructure/avoid flooding from the immense Sierra snowpack was successful, and an estimated 425,000 acre feet of water was sent to Los Angeles this runoff year.

3. <u>PERFORMANCE / VARIANCE ANALYSIS</u> & YEAR END PROJECTION

• Aqueduct operations and maintenance was above budgeted levels at fiscal year-end due to a site investigation and cleanup of hazardous waste at a site in the Laws area near Bishop. It has high levels of zinc, and may also have asbestos and lead from former tenant Standard Industrial Minerals. Los Angeles Aqueduct O&M actual expenditure was higher than budget due to managing record runoff. Combined Capital and O&M cost was within the acceptable variance at about 1% above target for this fiscal year.

4. <u>MITIGATION PLAN AND / OR</u> <u>RECOMMENDATIONS</u>

 Flood mitigation work from the heavy snowpack was completed in the beginning of the fiscal year, and standard O&M work, as well as the aforementioned hazardous waste project prevailed for the remainder of the fiscal year.

Within Acceptable Variance

Outside Acceptable Variance

Exceeds Target

LADWP RATES METRIC – GALLONS PER CAPITA PER DAY (GPCD)(Water) RESPONSIBLE MANAGER: Penny Falcon (W Gunday for PF RESPONSIBLE MANAGER: Penny Falcon (W Gunday for PF REPORTING PERIOD: June 2018

DEFINITION OF RATES METRIC: Level of water conservation against target GPCD. TARGET & ACCEPTABLE VARIANCE (FY 17/18): 104 GPCD & 3% Acceptable Variance

STATUS: **Outside Acceptable Variance**

FYTD	Approved Budget /	Actual	Varia	ance	Re-Estimate of	
as of:	Planned	ronaut	GPCD	%	Budget/Planned	
Jul-17	Jul-17 104 106		2	1.9%	106	
Aug-17	104	106	2	1.9%	106	
Sep-17	104	106	2	1.9%	106	
Oct-17	104	107	3	2.9%	106	
Nov-17	104	108	4	3.8%	106	
Dec-17	104	109	5	4.8%	106	
Jan-18	104	111	7	6.7%	106	
Feb-18	104	113	9	8.7%	106	
Mar-18	104	112	8	7.7%	106	
Apr-18	104	112	8	7.7%	106	
May-18	104	112	8	7.7%	106	
Jun-18	104	112	8	7.7%	106	
1	Acceptab	le Variance	±	3%	1.9%	

SOURCE OF DATA: Water Operations Monthly Supply Tracking

1. BACKGROUND / PURPOSE

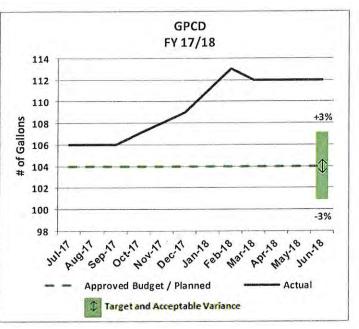
Gallons per capita per day (GPCD) is a measure of the City's progress in water conservation. The Mayor's Executive Directive No. 5 (ED5) set a goal of 20 percent reduction in GPCD by January 1, 2017.

2. ACHIEVEMENTS / MILESTONES MET

- On July 1, 2015, LADWP met ED5's first benchmark goal of 10 percent reduction in GPCD.
- On January 1, 2016, LADWP met ED5's . second benchmark goal of 15 percent reduction in GPCD.
- On January 1, 2017, LADWP met ED5's final goal of 20 percent reduction in GPCD.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- We have met the Mayor's ED5 target of 20 percent reduction by January 1st 2017.
- On January 1, 2018 LADWP changed . source meters for its water supply data tracking as a result of findings from the Water Loss Task Force. Baseline, current year, and ED5 target GPCD values were revised to be consistent with the new supply



data sources. While the changes shifted ED5 target and GPCD values slightly higher, the savings reduction compared to the baseline year remained unchanged.

Customer demands have remained steady through June 2018, which can be attributed to average temperatures and precipitation that were recorded for the month.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

- LADWP will continue to support customer water use efficiency practices through its rebate programs, conservation messaging, educational programs, and other innovative solutions. These efforts will continue to help the City achieve its long-term water use reduction goals.
- The City met the Mayor's ED5 target of 20% conservation on January 2017 and continues to conserve; albeit at a slightly lower rate. Increased education and rebates were added during the summer months to continue promoting conservation.

LADWP RATES METRIC – FIXED ASSETS REPLACEMENT BUDGET VS ACTUAL (Water)

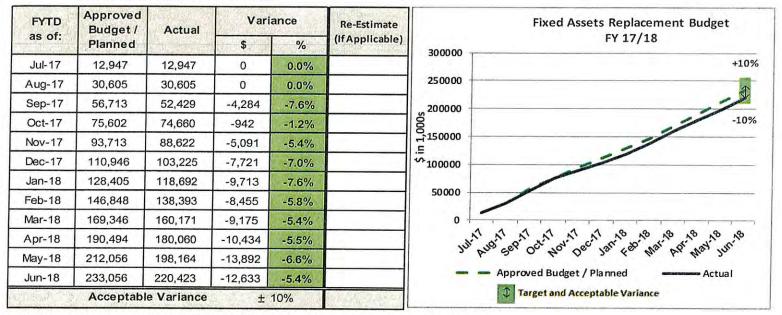
madi

REPORTING PERIOD: June 2018

DEFINITION OF RATES METRIC: Board approved annual budget vs actual expenditures. TARGET & ACCEPTABLE VARIANCE (FY 16/17): \$244,571K, 10 percent

STATUS: Within Acceptable Variance

RESPONSIBLE MANAGER: Dora Maese



SOURCE OF DATA: FIs 23220, 23290, 24150, 26220, 26331, 27210, 29140, and 29328.

1. BACKGROUND / PURPOSE

 This metric tracks the Water System's overall infrastructure replacement program. Expenditures include mainline replacement, trunkline replacement, pump stations, regulator stations, tanks and other key Water System facilities.

2. ACHIEVEMENTS / MILESTONES MET

- As of June 2018, installed 216,299 feet of mainline.
- As of June 30, 2018, installed 82.4% or 4,595 feet of the open trench portion of the 54-inch diameter steel pipe, Foothill TL Unit 3 Phase I and installed 10.7% or 835 feet of open trench portion of 54-inch diameter earthquake resistant pipe Foothill TL Unit 3 Phase II.

3. <u>PERFORMANCE / VARIANCE ANALYSIS</u> <u>& YEAR END PROJECTION</u>

• On target.

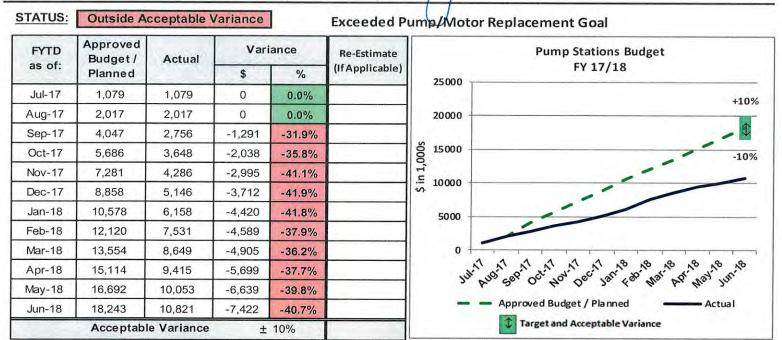
4. <u>MITIGATION PLAN AND / OR</u> <u>RECOMMENDATIONS</u>

 Continue hiring staff to accomplish the Water Infrastructure Plan goals.

41 LADWP RATES METRIC - PUMP STATIONS BUDGET VS ACTUAL (Water) SHAM AMMA REPORTING PERIOD: June 2018

RESPONSIBLE MANAGER: Susan Rowghani

DEFINITION OF RATES METRIC: Board approved annual budget vs actual expenditures. TARGET & ACCEPTABLE VARIANCE (FY 17/18): \$18,242.8K, 10 percent



SOURCE OF DATA: FI 23220, Pump Stations

1. BACKGROUND / PURPOSE

- The Pump Station Functional Item includes . projects for the replacement of individual pumps and motors in the pump stations, and also the upgrading of the entire system of pumping facilities.
- Goals for pump and motor replacement for . this fiscal year are to replace twelve pumps and/or motors.

2. ACHIEVEMENTS / MILESTONES MET

- Through June 2018, 15 pumps and/or . motors have been replaced, exceeding the 12 planned for the fiscal year.
- Construction on the Penstock Pump Station . was completed in December 2017.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR-END PROJECTION

Resources were pulled from the Penstock and Van Norman Pump Station No. 2 to work on Fletcher Pump, Lower Franklin Pump Stations, and Sheldon Pump Station.

- Construction on the Van Norman Pump Station began in December 2017 and is expected to be completed by August 2018.
- Design for the Redmont Pump Station is expected to be completed by October 2018. Construction has been tentatively pushed to October 2019 due to required shutdown activities being postponed because of unseasonably warm and dry winter conditions this year.
- Work on Garvanza Pump Station has not yet started as originally anticipated and will be reassessed at some time in the future.
- Addition and Betterment goals met. Resources were re-deployed in part to respond to damage due to wild fire at Green Verdugo Reservoir.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

Resources pulled due to fire damage at Green Verdugo Reservoir have returned to Van Norman Pump Station No. 2.

42 LADWP RATES METRIC – REGULATOR/RELIEF STATION RETROFITS BUDGET VS ACTUAL (Water) RESPONSIBLE MANAGER: Susan Rowghani

DEFINITION OF RATES METRIC: Board approved annual budget vs adtual expenditures. TARGET & ACCEPTABLE VARIANCE (FY 17/18): \$5,489, 10 percent

STATUS: Needs Attention

	Re-Estimate	ance	Vari	Actual	Approved Budget /	FYTD
	(If Applicable)	%	\$		Planned	as of:
		0.0%	0	518	518	Jul-17
		0.0%	0	1,055	1,055	Aug-17
1		13.6%	189	1,578	1,389	Sep-17
1,0005		28.3%	488	2,212	1,724	Oct-17
in 1,		19.0%	392	2,450	2,058	Nov-17
\$	C	12.6%	302	2,694	2,392	Dec-17
		6.4%	186	3,094	2,909	Jan-18
		8.3%	284	3,691	3,407	Feb-18
		4.6%	182	4,114	3,932	Mar-18
		-2.3%	-100	4,348	4,448	Apr-18
		-8.4%	-416	4,557	4,973	May-18
		-12.2%	-670	4,819	5,489	Jun-18

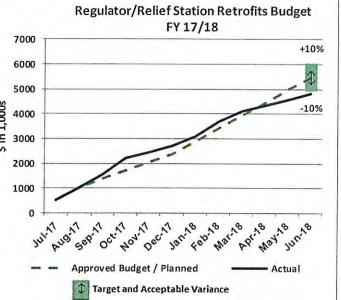
SOURCE OF DATA: FI 24150

1. BACKGROUND / PURPOSE

- Regulator/Relief Stations are necessary to maintain reliable supply and pressure through much of the water distribution system.
- Regulator Station Retrofit goals for this fiscal year are to replace or rehabilitate four Pressure Regulating Stations.

2. ACHIEVEMENTS / MILESTONES MET

- Through June 2018, three regulator stations have been replaced/ rehabilitated out of the planned four for the fiscal year.
- Completed work on the Grandview and Venice Regulator Station.
- Finished preliminary planning on the Horner Holt Regulator Station and will resume with final planning at some time in the future.



3. <u>PERFORMANCE / VARIANCE ANALYSIS</u> <u>& YEAR END PROJECTION</u>

- The Horner Holt Regulator Station project will be reassessed in the future.
- Design has been completed on the Lucille and Inglewood Regulator Station, but the construction phase has been moved to April 2019 since the Trunk Line Design-Build contract will not include mainline work as originally anticipated. Western District crews will first do mainline priority work before starting on the regulator station.
- More effort on capital repair and construction work to rebuild, retrofit or replace equipment is being spent than originally estimated.

4. <u>MITIGATION PLAN AND / OR</u> <u>RECOMMENDATIONS</u> On target.

Within Acceptable Variance

LADWP RATES METRIC – MAINLINE REPLACEMENT (Water)

RESPONSIBLE MANAGER: Breonia Lindsey/Sandra Foster

DEFINITION OF RATES METRIC: Feet of mainline replaced against plan.

REPORTING PERIOD: June 2018

....

TARGET &	ACCEPTABL	E VARIANO	CE (FY 17/1	18): 215,0	000 feet, 10%	
STATUS:	Within Ac	ceptable V	ariance			
FYTD	Approved Budget /	Actual	Vari	ance	Re-Estimate	
as of:	Diannad		Feet	0/	(If Applicable)	

FYTD	Budget /	Actual	Var	lance	Re-Estimate			Replacement
as of:	Planned		Feet	%	(If Applicable)	250000	FY	17/18
Jul-17	17,917	11,204	-6713	-37.5%		250000		
Aug-17	35,833	25,883	-9950	-27.8%		200000		
ep-17	53,750	43,061	-10689	-19.9%		set		
Oct-17	71,667	61,523	-10144	-14.2%		لللہ 150000		
Nov-17	89,583	75,755	-13828	-15.4%				11
Dec-17	107,500	88,922	-18578	-17.3%		Number Nu	1	
Jan-18	125,417	106,805	-18612	-14.8%		50000	1	1
eb-18	143,333	124,041	-19292	-13.5%				
Nar-18	161,250	144,387	-16863	-10.5%		0	1 1 1 1	
pr-18	179,167	174,035	-5132	-2.9%		11111	Sept Oct Nov De	N1 N8 18 1
lay-18	197,083	203,299	6216	3.2%		2. b.	. 30. 03 40 De	7.0 60 Mu
un-18	215,000	216,543	1543	0.7%			Approved Budget /	
	Acceptabl	e Variance	±	10%			Target and Acce	eptable Variance

SOURCE OF DATA: FI 26331, Job 30067

1. BACKGROUND / PURPOSE

 Mainline replacement is a portion of the Water System's strategy to maintain reliability, to reduce leaks and minimize interruptions and damage to the community.

3. <u>PERFORMANCE / VARIANCE ANALYSIS</u> <u>& YEAR END PROJECTION</u>

• Mainline footage replaced exceeded the fiscal year goal of 215,000 feet.

2. ACHIEVEMENTS / MILESTONES MET

 216,299 feet of mainline were installed/replaced. Exceeded the Fiscal Year 17/18 goal of 215,000 feet.

4. <u>MITIGATION PLAN AND / OR</u> <u>RECOMMENDATIONS</u>

 Continue with planned hiring for mainline crews to reach the replacement rate of 300,000 feet of pipe per year, resulting in a replacement cycle of 120 years.

LADWP RATES METRIC – TRUNK LINE REPLACEMENT (Water) MMMMMM

RESPONSIBLE MANAGER: Susan Rowghani DEFINITION OF RATES METRIC: Feet of trunk line replaced against the plan. TARGET & ACCEPTABLE VARIANCE (FY 17/18): 7,900 feet, 10 percent

REPORTING PERIOD: June 2018

44

Linear Feet of TL Planned	Actual Linear Feet of TL Replaced	Variance		Re-Estimate	Trunk Line Replacement		
		ft	%	(If Applicable)	10000	FY 17/18	
493	226	-267	-54.1%		9000	+109	
985	900	-85	-8.6%		8000		
1,478	1,219	-259	-17.5%		7000		
1,970	1,616	-354	-18.0%		§ 6000	10%	
2,568	2,124	-444	-17.3%		t 5000	./	
3,115	2,390	-725	-23.3%			/	
3,663	2,763	-900	-24.6%			i	
4,510	3,326	-1,184	-26.3%	· · · · · · · · · · · · · · · · · · ·	1000	1	
5,358	3,874	-1,484	-27.7%		0		
6,205	4,712	-1,493	-24.1%	_	101-17-10	Sep Oct How Dec Jan 40 18 100 10 10 10	
7,053	5,245	-1,808	-25.6%		20 P.D.		
7,900	6,091	-1,809	-22.9%			- Linear Feet of TL Planne	
	Feet of TL Planned 493 985 1,478 1,970 2,568 3,115 3,663 4,510 5,358 6,205 7,053	Linear Linear Feet Feet of TL of TL Planned Renlaced 493 226 985 900 1,478 1,219 1,970 1,616 2,568 2,124 3,115 2,390 3,663 2,763 4,510 3,326 5,358 3,874 6,205 4,712 7,053 5,245	Linear Linear Feet of TL Variant Feet of TL of TL ft A93 226 -267 985 900 -85 1,478 1,219 -259 1,970 1,616 -354 2,568 2,124 -444 3,115 2,390 -725 3,663 2,763 -900 4,510 3,326 -1,184 5,358 3,874 -1,483 6,205 4,712 -1,403 7,053 5,245 -1,808	Linear Feet of TL Planned Linear Feet of TL Renlaced Variance 493 226 ft % 493 226 -267 -54.1% 985 900 -85 -86% 1,478 1,219 -259 -17.5% 1,970 1,616 -354 -18.0% 2,568 2,124 -444 -17.3% 3,115 2,390 -725 -23.3% 3,663 2,763 -900 -24.6% 4,510 3,326 -1,184 -26.3% 5,358 3,874 -1,483 -27.7% 6,205 4,712 -1,493 -24.1% 7,053 5,245 -1,808 25.6%	Linear Linear Feet Variance Re-Estimate Feet of TL $0f$ TL ft % 493 226 -267 -54.1% 985 900 -85 -86% 1,478 1,219 -259 -17.5% 1,970 1,616 -354 -18.0% 2,568 2,124 -444 -17.3% 3,115 2,390 -725 -23.3% 3,663 2,763 -900 -24.6% 4,510 3,326 -1,184 -26.3% 5,358 3,874 -1,483 -27.7% 6,205 4,712 -1,403 -24.1% 7,053 5,245 -1,808 -25.6%	Linear Feet of TL PlannedLinear Feet of TL RenlacedVariance ftRe-Estimate (lf Applicable)10000 9000493226-267-54.1%10000985900-85-8.6%90001,4781,219-259-17.5%90001,9701,616-354-18.0%90002,5682,124-444-17.3%90003,1152,390-725-23.3%90003,6632,763-900-24.6%90004,5103,326-1,184-26.3%100005,3583,874-1,483-24.1%90006,2054,712-1,493-24.1%90007,0535,245-1,808-25.6%9000	

SOURCE OF DATA: FI 23190 - Jobs 23075, 23202; FIs 23222 - Jobs 23204, 23117, 23433; FI 26220 - Job 23137; FI 29130 - Jobs 20058, 23075

1. BACKGROUND / PURPOSE

Trunk Lines are a major component of the Water System infrastructure system. Rehabilitation and replacement are necessary to maintain reliable supply and safe operation of the system.

2. ACHIEVEMENTS / MILESTONES MET

- City Trunk Line North Units 1 & 2 and Coronado Trunk Line 30% design has been completed as of June 1, 2018
- RSC Upper Reach Units 5 & 6 completed 100% construction in June 2018.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR-END PROJECTION

- Fabrication delays on Department provided pipe resulted in a schedule delay of the LA Reservoir UV Disinfection Plant project.
- LA Reservoir UV Contractor was late in . placing concrete for the invert of the vault, thus delaying pipe installation.
- Upper Stone is delayed due to change in pipe manufacturer at beginning of job.

submittal reviews for shoring and for pipe fabrication (most had three revisions).

- MWD LA-30 Notice to Proceed was issued in May 2018. Groundbreaking is scheduled for October 2018 (installation of 1500 linear ft. had been forecasted).
- Total footage of trunk line replacement was not processed at the anticipated rate for this fiscal year due to the time required to ramp up design, pipe fabrication, permitting and construction.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

- The Water System continues to work to obtain resources necessary to support infrastructure goals.
- After experiencing fabrication delays earlier this fiscal year on Department-provided pipe, the contractor continued work on the LA Reservoir UV Disinfection Plant to allow for quick installation once pipe was delivered. Currently, the pipeline installation is back on track.

LADWP RATES METRIC - METER REPLACEMENT (Water)

RESPONSIBLE MANAGER: Breonia Lindsey/Sandra Foster

15,334

17,608

19,755

22,083

25,123

28.198

DEFINITION OF RATES METRIC: Number of meters replaced against plan. TARGET & ACCEPTABLE VARIANCE (FY 17/18): 29,500 meters, 10% **REPORTING PERIOD:** June 2018

45

STATUS:	Within Ac				
FYTD as of:	Approved Budget /	Actual	Variance		Re-Estimate
	Planned		Meters	%	(If Applicable)
Jul-17	2,458	2,149	-309	-12.6%	
Aug-17	4,917	4,552	-365	-7.4%	
Sep-17	7,375	6,663	-712	-9.7%	
Oct-17	9,833	8,691	-1142	-11.6%	
Nov-17	12,292	10,724	-1568	-12.8%	
Dec-17	14,750	12,810	-1940	-13.2%	

-1874

-2059

-2370

-2500

-1919

-1302

-10.9%

-10.5%

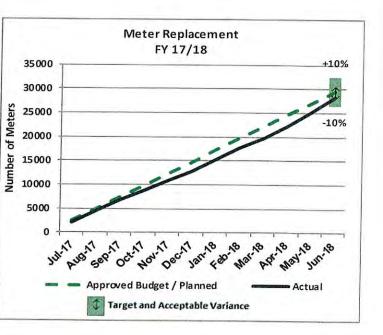
-10.7%

-10.2%

-7.1%

-4.4%

± 10%



SOURCE OF DATA: FI 27215, Job 30053

Acceptable Variance

17,208

19,667

22,125

24,583

27,042

29,500

Jan-18

Feb-18

Mar-18

Apr-18

May-18

Jun-18

1. BACKGROUND/PURPOSE

 Accurate meter reading is necessary to ensure reliable and accurate billing. This metric measures both the replacement of infrastructure assets and our commitment to accurate meter reading and billing.

- 2. ACHIEVEMENTS/MILESTONES MET
 - 28,198 meters of 29,500 meters were installed for FY 17/18.

3. <u>PERFORMANCE/VARIANCE ANALYSIS</u> <u>& YEAR END PROJECTION</u>

 The Division almost achieved its fiscal year goal; however, was slightly off target due to delays in hiring personnel in the Meter and Services group.

4. <u>MITIGATION PLAN AND/OR</u> <u>RECOMMENDATIONS</u>

- The goal was increased to ensure the ability to meet CISCON settlement requirements and industry standards on meter life cycle.
- The Division is continuing with its hiring efforts to meet the demands and achieve next fiscal year's goal.

46 LADWP RATES METRIC – WATER QUALITY CAPITAL BUDGET VS ACTUAL

(Water)

RESPONSIBLE MANAGER: Susan Rowghani MMM. KMM REPORTING PERIOD: June 2018 DEFINITION OF RATES METRIC: Board approved annual budget vs actual expenditures. TARGET & ACCEPTABLE VARIANCE (FY 17/18): \$268,840K, 10 percent

STATUS: Outside Acceptable Variance

FYTD Approved Budget /	Actual	Vari	ance	Re-Estimate	Water Quality Budget - Capital		
as of: Planned			\$	%	(If Applicable)		FY 17/18
Jul-17	10,695	10,696	1	0.0%		350000	
Aug-17	30,360	30,362	2	0.0%	1	300000 -	
Sep-17	54,928	41,657	-13,271	-24.2%		250000 -	
Oct-17	82,225	60,391	-21,834	-26.6%		§200000 -	
Nov-17	107,850	76,269	-31,581	-29.3%		ਜੇ _⊑150000 -	
Dec-17	130,478	91,633	-38,845	-29.8%		ŝ	/
Jan-18	153,989	108,091	-45,898	-29.8%		100000 -	
Feb-18	176,852	123,432	-53,420	-30.2%		50000	
Mar-18	198,625	152,316	-46,309	-23.3%		0 +	· · · · · · · · · · ·
Apr-18	219,647	169,616	-50,031	-22.8%		July	1 way sep oct wor peer san teb war por way
May-18	243,751	183,664	-60,087	-24.7%		3	,
Jun-18	268,840	202,111	-66,729	-24.8%		-	Approved Budget / Planned Ac
	Acceptat	ole Variance	±	10%			Target and Acceptable Variance

SOURCE OF DATA: FIs 23222, 24130, 24310, 24316, 27215, and 29130.

1. BACKGROUND / PURPOSE

This metric measures the Water System's progress towards meeting mandated water quality regulations.

2. ACHIEVEMENTS / MILESTONES MET

- Forebay Construction started on the 99th St. Wells Filtration Plant in March 2018.
- Elysian Reservoir placed back in-service in March 2018.
- RSC Upper Reach Unit 7 was re-advertised on June 29th, 2018.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR-END PROJECTION

- Water Quality Improvement Program Reservoir Improvements were underspent through June 2018 mostly due to construction delays by Department forces.
- RSC 5&6 and LARWIP Bull Creek, 100% construction Complete as of June 1st and 5th of 2018, respectively.

RSC 7 is scheduled to be presented to the Board for Contract Award approval in September 2018.

+10%

Junia

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

- Expenditure and construction progress will continue to be carefully monitored through the Water System project/construction management processes.
- Planning on North Hollywood Central, North Hollywood West, and Rinaldi-Toluca Chlorination Station started this fiscal year.
- As Ground Water remediation projects moved from planning to design and construction, projects have evolved to provide more efficient operation. Several smaller jobs are envisioned in place of a single treatment facility resulting in a longer program with lower overall cost. Other Water Quality programs are to meet regulatory requirements progress although at a slightly slower pace of expenditure.

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Exceeds Target Needs Attention
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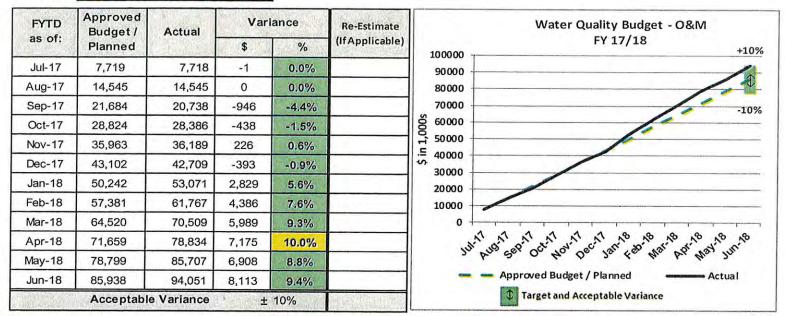
47 LADWP RATES METRIC - WATER QUALITY BUDGET VS ACTUAL-0&M Milai Taghawi (Water)

RESPONSIBLE MANAGER: Steven R. Cole

REPORTING PERIOD: June 2018

DEFINITION OF RATES METRIC: Board approved annual budget vs actual expenditures. TARGET & ACCEPTABLE VARIANCE (FY 17/18): \$85,938K, 10 percent

STATUS: Within Acceptable Variance



SOURCE OF DATA: Fls 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.
- The Annual Drinking Water Quality Report . (also known as the Consumer Confidence Report) was distributed to customers on May 1, 2018.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

The Distribution Reservoir O&M Security Services budget was over-estimated this fiscal year.

- Filter Plant Operations was overspent due to additional sludge removal as a result of higher Aqueduct flows and less pond capacity. In addition, the overrun in materials and supplies was due to an increased need for liquid oxygen (since the oxygen plant is down) and chemicals to treat Aqueduct water. Variance carried over from previous months.
- Water Quality Groundwater O&M was overspent due to necessary groundwater remediation project work.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

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

LADWP RATES METRIC – BUDGET VS ACTUAL FOR OWENS LAKE 0&M (Water)

RESPONSIBLE MANAGER: Michael Grahel

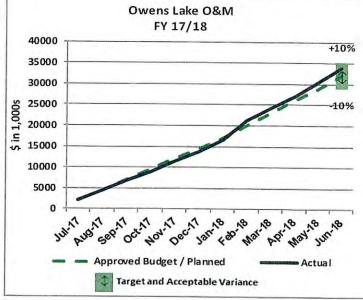
REPORTING PERIOD: June 2018

48

DEFINITION OF RATES METRIC: Board approved annual budget vs. actual expenditures TARGET & ACCEPTABLE VARIANCE (FY 17/18): \$32,088 K, 10%

STATUS: Within Acceptable Variance

FYTD as of:	Approved Budget /	Actual	Vari	ance	Re-Estimate
	Planned		\$	%	(If Applicable)
Jul-17	2,050	2,050	0	0.0%	· · ·
Aug-17	4,556	4,556	0	0.0%	
Sep-17	7,033	6,786	-247	-3.5%	
Oct-17	9,538	8,938	-600	-6.3%	
Nov-17	12,043	11,515	-528	-4.4%	
Dec-17	14,548	13,713	-835	-5.7%	
Jan-18	17,103	16,522	-581	-3.4%	
Feb-18	20,058	21,125	1067	5.3%	
Mar-18	23,013	24,249	1236	5.4%	
Apr-18	25,968	26,942	974	3.8%	
May-18	28,923	30,443	1520	5.3%	
Jun-18	32,088	33,982	1894	5.9%	



SOURCE OF DATA: FIs 3022002 and 4013006.

1. BACKGROUND / PURPOSE

Operation and maintenance of dust control facilities at Owens Lake are necessary for efficient and effective operations. Dust control is a regulatory mandate to ensure air quality in the area.

2. ACHIEVEMENTS / MILESTONES MET

- Crews completed 10 miles of road maintenance work.
- Crews completed 50% of brine maintenance as part of a GBUAPCD maintenance order for area T8-West.
- Crews completed 1.8 miles of berm reconstruction as part of the GBUAPCD maintenance order for area T-18.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

On target.

- 4. MITIGATION PLAN AND / OR RECOMMENDATIONS
 - Staff will continue to monitor O&M expenditures to ensure efficient operations of dust control activities and appropriate Capital vs O&M expenditures.
 - Continue to hire staff.

Exceeds Target Needs Attention

Joint System

LADWP RATES METRIC - Total FTEs Against Plan

RESPONSIBLE MANAGER: Shannon C. Pascual

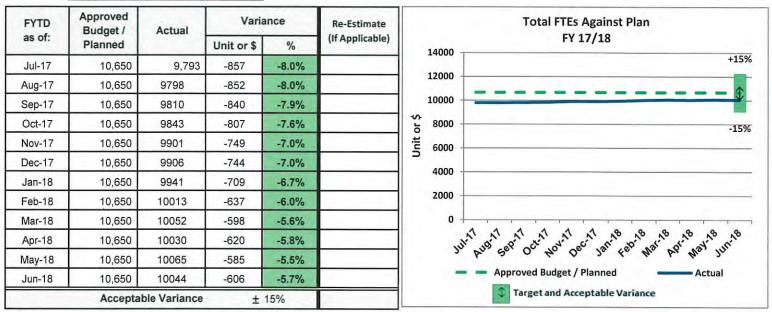
REPORTING PERIOD: June 2018

49

DEFINITION OF RATES METRIC: Total number of occupied full-time equivalent (FTE) positions vs. annual Authorized Personnel Resolution

TARGET & ACCEPTABLE VARIANCE (FY 17/18): +/- 15%

STATUS: Within Acceptable Variance



SOURCE OF DATA: Monthly Staffing Report

1. BACKGROUND / PURPOSE

HR will track LADWP's progress in achieving the staffing levels necessary to accomplish the strategic goals set forth in the Water and Power Rate Ordinances.

2. ACHIEVEMENTS / MILESTONES MET

- External Hires = 40
- Attrition = 77
- Net New Employees = -37

3. <u>PERFORMANCE / VARIANCE ANALYSIS</u> <u>& YEAR END PROJECTION</u>

N/A

4. <u>MITIGATION PLAN AND / OR</u> <u>RECOMMENDATIONS</u>

N/A

LADWP RATES METRIC – *Financial and Human Resources Replacement Project Total Spending Against Plan (Joint)*

RESPONSIBLE MANAGER: STEPHAN TUCKER

REPORTING PERIOD: thru June 2018

DEFINITION OF RATES METRIC: Board approved annual budget vs. actual expenditures (\$ thousand) TARGET & ACCEPTABLE VARIANCE (FY 17/18): FY17-18 Board Approved Budget – May 2017; +/- 20%

STATUS: Outside Acceptable Variance

FYTD	Approved Budget /	Actual	Varia	ance	Re-Estimate	Financial & Human Resources Replacement Project Total Spending Against Plan
as of:	Planned		Unit or \$	%	(If Applicable)	(FY 17/18)
Jul-17	2,607	191	-2416	-92.7%		40,000
Aug-17	5,215	507	-4708	-90.3%	1	35,000
Sep-17	7,822	769	-7053	-90.2%		30,000
Oct-17	10,429	1,164	-9265	-88.8%	1	52 25,000 52 20,000 -209 -209
Nov-17	13,035	1,815	-11220	-86.1%		20,000 -209
Dec-17	15,642	2,582	-13060	-83.5%		E 15,000
Jan-18	18,249	3,252	-14998	-82.2%		10,000
Feb-18	20,856	4,081	-16775	-80.4%		5,000
Mar-18	23,463	5,345	-18118	-77.2%		0
Apr-18	26,070	6,207	-19863	-76.2%		
May-18	28,677	7,298	-21379	-74.6%		
Jun-18	31,315	8,264	-23051	-73.6%		Actual
	Acceptabl	e Variance	±	20%	1	Target and Acceptable Variance

SOURCE OF DATA: FI 29401 (Job Z4905) and FI 28974 (Job U2293 and Job U2295)

1. BACKGROUND / PURPOSE

- This program is to modernize technology and business processes according to leading practices and replace all legacy financial services and human resources management systems; and enhance or replace procurement and inventory management systems.
- This report provides visibility for program performance to ensure this multi-year system replacement project will complete within the Board-approved budget.
- The Budget System Replacement (BSR) Project will provide an early and interim implementation of a budget and decision support solution, but it is not necessarily the final solution. Despite the limitations to capture transactions and perform analysis using the existing mainframe financial applications, this interim solution is a first step to integrate the budget system, financial planning, and rates models established during the 2016 rate enabling LADWP to more efficiently and effectively evaluate and communicate its implementation of the 2016 rate action and to establish the basis for the next rate case to ensure continued financial stability.

2. ACHIEVEMENTS / MILESTONES MET

- ERP: Enterprise Technology Advisory Services request for qualifications was released on January 11, 2018. Recommendation of Qualification Award anticipated November 2018.
- ERP: In April 2018, LADWP procured ERP Implementation and Technology Governance Training for Steering Committee and 101 project team members and subject matter experts.
- ERP: In May 2018, Gartner, Inc. was tasked with a comprehensive review of LADWP's ERP software and system integrator procurement and general implementation strategies. This included requirements review, visioning workshops, and an IT workforce assessment.
- BSR: RFP No. 90451 was released on March 9, 2018.
- BSR: As part of the preparation for the BSR staff has conducted end-to-end reviews (and mapping) of 11 major budget business process maps; 11 shared services process maps; 24 allocations & indirects process maps; 13 directs process maps; identified 104 budget reports and 62 templates.
- PROGRAM HIRING: As of June 30, 2018 40 of 69 authorized positions have been filled.

Within Acceptable Variance

Exceeds Target

Hiring is underway to appoint additional personnel to various orgs (FSO, HR, ITS, SCS, and CPM). For BSR, in addition to Budget Office SMEs, as of June 30, 2018, 2.5 authorized positions are filled within FSO and there is a plan to fill 1 authorized position from IT.

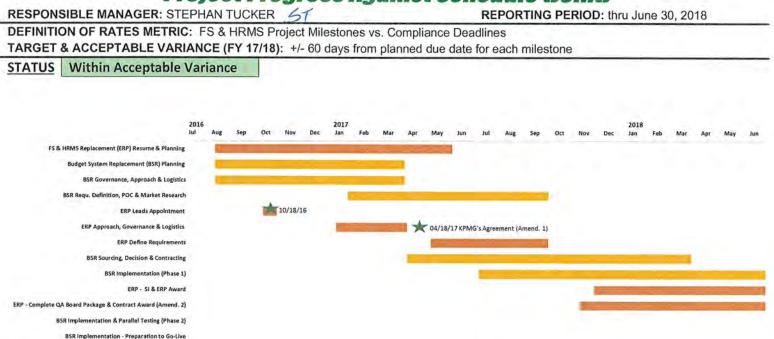
3. <u>PERFORMANCE / VARIANCE ANALYSIS</u> & YEAR END PROJECTION

- Actual spending is well below approved budget because contracts have not yet been established to buy ERP software and hire a systems implementation consulting team. Therefore actual spending on both projects will be well below \$31 million approved for FY 17/18.
- Executive management determined LADWP's interests are best served by soliciting software purchase separately from system integrator services. Therefore, two procurements will be completed sequentially. Adjustments to budgetary cash flows are being proposed for LADWP Board of Commissioners approval.
- ERP labor expenditures are below approved budgets as hiring is ongoing to fill 69 newly authorized positions.
- BSR: Expenditures are below as Contract Award is being delayed to November 2018. FSO is working with SCS and PEC, which includes representatives from ITS, Water, Power & Joint, to expedite the rebid, selection and contract award of the BSR RFP.

4. <u>MITIGATION PLAN AND / OR</u> <u>RECOMMENDATIONS</u>

- CPMO are developing a detailed implementation plan that will update Program milestones and budgetary cash flows that reflect current strategy for sourcing and selection of software, system integrator services, and other support services (OCM, technical, and IV&V). These updates will be available by Q1 2019.
- BSR: Continue working with SCS and PEC towards the selection and award of the contract for software and integration services. Finalize the end-to-end reviews, processes maps and reports and templates inventory prior to the arrival of the System Integrator expected for November 2018.

LADWP RATES METRIC – *Financial and Human Resources Replacement* Project Progress Against Schedule (Joint)



MILESTONE/DEADLINE DESCRIPTION	PLANNED	ACTUAL	a construction of the second sec	ABLE VARIANCE (S FROM PLANNED)
ERP - Resume with Executive Sponsors' Meeting	10/18/16	10/18/16	12/17/16	8/19/16
BSR - Complete Planning	3/31/17	05/15/17	5/30/17	1/30/17
BSR - Define Approach, Governance & Logistics	3/31/17	05/15/17	5/30/17	1/30/17
BSR - Define Requirements & Differentiation Demos	9/30/17	10/25/2017	11/29/17	8/1/17
ERP - Identify Financial, HR, IT Leads	10/18/16	10/18/16	12/17/16	8/19/16
ERP - Complete Revision to KPMG's Agreement (Amend. 1)	3/31/17	04/18/17	5/30/17	1/3017
ERP – Complete Requirements Definition	9/30/17	2/1/2018	11/29/17	8/1/17
BSR – Sourcing, Complete Board Package & Contract Approval	3/31/18	IN PROGRESS	5/30/18	1/30/18
BSR - Finish Implementation Phase 1	12/31/18		3/1/19	11/1/18
ERP - Complete SI & ERP Award	3/12/19		5/11/19	1/11/19
ERP - Complete QA Board Package & Contracts Award (Amend. 2)	1/27/18		3/26/18	11/28/17
BSR- Finish Implementation Phase 2	6/30/19		8/29/19	5/1/19
BSR - Go-Live	7/1/19	1	8/30/19	5/2/19

SOURCE OF DATA: FI 294-01 (Job Z4905) and FI 289-74 (Job U2293) - PM Core Team & KPMG

1. BACKGROUND / PURPOSE

- This program is to modernize technology and business processes according to leading practices and replace all legacy financial services and human resources management systems; and enhance or replace procurement and inventory management systems.
- This report provides visibility for program performance to ensure this multi-year system replacement project will complete within the targeted timeline.
- The Budget System Replacement (BSR) Project will provide an early and interim implementation of a budget and decision support solution, but it is not necessarily the final solution. Despite the

limitations to capture transactions and perform analysis using the existing mainframe financial applications, this interim solution is a first step to integrate the budget system, financial planning, and rates models established during the 2016 rate enabling LADWP to more efficiently and effectively evaluate and communicate its implementation of the 2016 rate action and to establish the basis for the next rate case to ensure continued financial stability.

2. ACHIEVEMENTS / MILESTONES MET

 ERP: Enterprise Technology Advisory Services request for qualifications was released on



January 11, 2018. Recommendation of Qualification Award anticipated November 2018.

- ERP: In April 2018, LADWP procured ERP Implementation and Technology Governance Training for Steering Committee and 101 project team members and subject matter experts.
- ERP: In May 2018, Gartner, Inc. was tasked with a comprehensive review of LADWP's ERP software and system integrator procurement and general implementation strategies. This included requirements review, visioning workshops, and an IT workforce assessment.
- BSR: RFP No. 90451 was released on March 9, 2018.
- BSR: As part of the preparation for the BSR staff has conducted end-to-end reviews (and mapping) of 11 major budget business process maps; 11 shared services process maps; 24 allocations & indirects process maps; 13 directs process maps; identified 104 budget reports and 62 templates.
- PROGRAM HIRING: As of June 30, 2018 40 of 69 authorized positions have been filled. Hiring is underway to appoint additional personnel to various orgs (FSO, HR, ITSD, SCS, and CPMD). For BSR, in addition to Budget Office SMEs, as of April 30, 2018, 2.5 authorized positions are filled within FSO and there is a plan to fill 1 authorized position from IT.

3. <u>PERFORMANCE / VARIANCE ANALYSIS</u> <u>& YEAR END PROJECTION</u>

- ERP: Executive management determined LADWP's interests are best served by soliciting software purchase separately from system integrator services. The two procurements will be completed sequentially, requiring adjustments to targeted milestone due dates. Tentative targets to advertise are Q3 2018 for software RFP and Q4 2018 for system implementation RFP.
- BSR: After the review of proposals received for RFP 90451, on April 26, 2018, the PEC Committee decided to issue a rebid for this project. Therefore the Recommendation of Contract Award is being delayed to November 2018. FSO is working with SCS and PEC, which includes representatives from ITS, Water, Power & Joint, to expedite the rebid, selection and contract award of the BSR RFP.

4. <u>MITIGATION PLAN AND / OR</u> <u>RECOMMENDATIONS</u>

- CPMO are developing a detailed implementation plan that will update Program milestones and target dates to reflect current strategy for sourcing and selection of software, system integrator services, and other support services (OCM, technical, and IV&V). These updates will be available by Q3 2018.
- BSR: Continue working with SCS and PEC towards the selection and award of the contract for software and integration services. Finalize the end-to-end reviews, processes maps and reports and templates inventory prior to the arrival of the System Integrator expected for November 2018.

Within Acceptable Variance

LADWP RATES METRIC – LADWP EMPLOYEE COST BUDGET VS. ACTUAL

(LADWP)

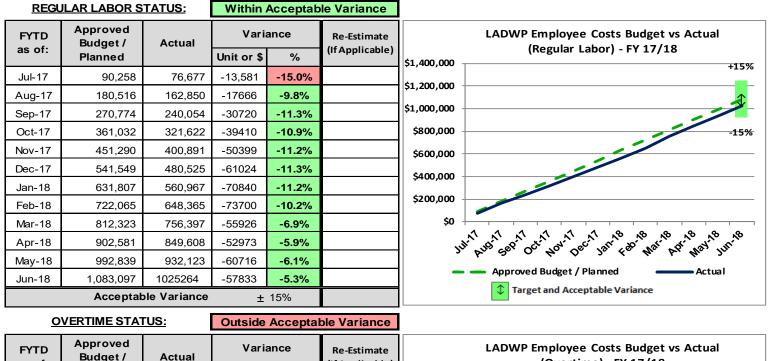
RESPONSIBLE MANAGER: LADWP Senior Management

REPORTING PERIOD: June 2018

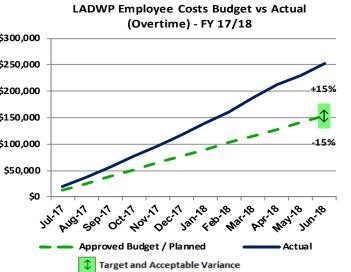
52

DEFINITION OF RATES METRIC: LADWP employee costs (including regular labor, overtime, pension and healthcare, excluding daily exempt and Utility Pre-Craft Trainee) budget vs. actual (\$M)

TARGET & ACCEPTABLE VARIANCE (FY 17/18): +/- 15%



FYTD	Budget /	•		ance	Re-Estimate	
as of:	Planned		Unit or \$	%	(If Applicable)	
Jul-17	12,823	19,505	6,682	52.1%		
Aug-17	25,647	37,145	11499	44.8%		
Sep-17	38,470	56,115	17645	45.9%		
Oct-17	51,293	77,538	26245	51.2%		
Nov-17	64,116	96,281	32165	50.2%		
Dec-17	76,940	117,444	40505	52.6%		
Jan-18	89,763	139,502	49739	55.4%		
Feb-18	102,586	160,564	57978	56.5%		
Mar-18	115,409	187,827	72418	62.7%		
Apr-18	128,233	211,821	83589	65.2%		
May-18	141,056	230,329	89273	63.3%		
Jun-18	153,879	253300.7	99422	64.6%		
	Acceptable Variance ± 15%					



Employee Cost Category	Budget	Actual	Variance	Variance %	FY 17/18 Approved
Regular Labor	1,083,097	1,025,264	-57,833	-5%	1,083,097
Overtime	153,879	253,301	99,422	65%	153,879
Regular Labor + Overtime	1,236,976	1,278,565	41,589	3%	1,236,976
Health Care Allocation	312,977	307,691	-5,286	-2%	312,977
Retirement & Death Benefit	500,750	449,430	-51,320	-10%	500,750
Total	2,050,703	2,035,686	-15,017	-0.7%	2,050,703

LADWP RATES METRIC – *Total Number of Water and Power Employees* per Customer Meter (Joint)

RESPONSIBLE MANAGER: Corporate Performance

REPORTING PERIOD: June 2018

53

DEFINITION OF RATES METRIC: Total number of water and power employees (excluding daily exempt and utility pre-craft trainees) per water and power meters

TARGET & ACCEPTABLE VARIANCE (FY 17/18/): No Target

STATUS: Information Only

SOURCE OF DATA: LADWP Monthly Staffing Report, Customer Care and Billing (CCB) System

1. BACKGROUND / PURPOSE

On May 5, 2017, the Board of Water and Power Commissioners approved Resolution 017252 adding the Total Number of Water and Power Employees per Customer Meter metric to the LADWP Rates Metrics. This metric measures the total number of water and power employees (excluding daily exempt and utility pre-craft trainees) per water and power meter. This metric does not have a target and is provided as Information Only.

2. ACHIEVEMENTS / MILESTONES MET

Data for the number Total Number of Water and Power Employees is obtained from the LADWP Monthly Staffing Report provided by Human Resources Division.

Data for the total number of water and power meters is obtained through a query of the CCB system and provided by Information Technology Services. It is important to note that the data for total number of water and power meters is point-in-time which means that the data represents the number of meters at the exact date and time the query was executed. Additionally, data for the number of water and power meters cannot be obtained for past dates and times. An automated query captures this data on the last date of every month.

3. <u>PERFORMANCE / VARIANCE ANALYSIS</u> <u>& YEAR END PROJECTION</u>

As of June 2018:

Total Number of Water and Power Employees per Customer Meter 10,044/2,283,208 = .0044

Total Number of Water and Power Employees (excluding daily exempt and utility pre-craft trainees) as of June 2018.

System	Occupied
Power	4,114
Water	1,977
Joint	3,953
Total	10,044

Total Number of Water and Power Meters as of June 30, 2018.

	Total	No. Meter On	No. Meter Off
Power	1,577,953	1,540,365	37,588
Water	705,255	682,682	22,573
Total	2,283,208	2,223,047	60,161

*Meter data for month end was not available for July 2017 through November 2017.

4. <u>MITIGATION PLAN AND / OR</u> <u>RECOMMENDATIONS</u>

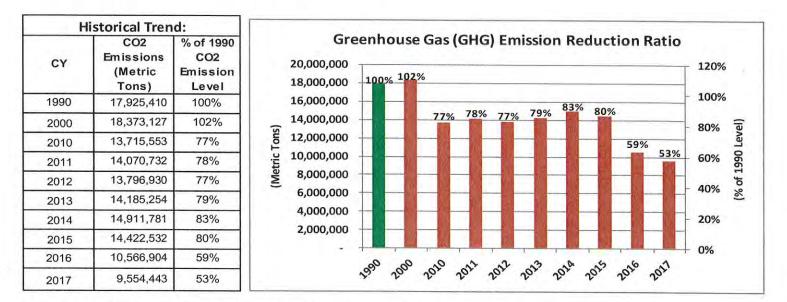
Continue to provide this dashboard to the Board of Water and Power Commissioners and the Office of Public Accountability for review.

LADWP RATES METRIC – *GHG Emissions Reduction Ratio (Joint)*

RESPONSIBLE MANAGER: Mark Sedlacek Ade an Luse Jo, Mark Sedlack REPORTING PERIOD: As of June 2018 DEFINITION OF RATES METRIC: Current Year GHG Emissions /1990 GHG Emissions TARGET & ACCEPTABLE VARIANCE (CY 2017): 70%; +5%

STATUS: Exceeds Target

- CY 2017 Target: 70% of 1990 GHG Emission level
- CY 2017 Acceptable Variance: + 5%



SOURCE OF DATA: Federal and state mandatory reporting compliance reports

1. BACKGROUND / PURPOSE

The State of California has adopted targets to reduce GHG emissions to 1990 levels by 2020 and to ultimately achieve an 80% reduction from 1990 levels by 2050. GHG reduction efforts from the electricity sector, including LADWP, are a critical component in meeting these targets.

2. ACHIEVEMENTS / MILESTONES MET

- Early divestiture of Navajo Generating Station in July 2016.
- Beginning January 1, 2016, incorporated carbon cost when determining optimal economic dispatch for individual generating units, which increased use of natural gas over coal resources.
- LADWP's electricity supply in 2017 included 30% renewable energy.
- LADWP's 2017 emissions are 47 percent below its 1990 emissions baseline.

3. <u>PERFORMANCE / VARIANCE ANALYSIS</u> <u>& YEAR END PROJECTION</u>

No variance explanation needed.

4. <u>MITIGATION PLAN AND / OR</u> <u>RECOMMENDATIONS</u>

 No mitigation needed. 2017 emissions were significantly reduced as a result of measures listed under #2.

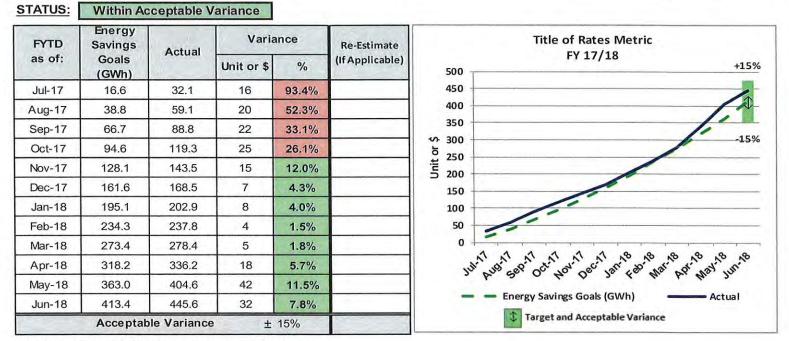
Needs Attention

55 LADWP RATES METRIC - Energy Savings Variance Report (Joint) RESPONSIBLE MANAGER: David Jacot REPORTING PERIOD: May -2018 thru Jun-2

REPORTING PERIOD: May -2018 thru Jun-2018

DEFINITION OF RATES METRIC: Energy Savings Against Plan

TARGET & ACCEPTABLE VARIANCE (FY 17/18): GWh installed compared to the 2010 baseline/GWh for all customers. 15%



SOURCE OF DATA: Efficiency Solutions KPI Report

NOTE: Energy Savings Goals and Actual do not include 31.5 GWh Embedded Passive Energy Savings from Water Measures.

1. BACKGROUND / PURPOSE

Efficiency Solutions' (ES) energy savings goals are a key performance metric related to the Energy Cost Adjustment Factor, a critical power rate component. Energy Savings are compiled monthly into a Key Performance Indicators database encompassing measures installed by participants in ES programs and initiatives. The OPA has requested this metric be reported to the Board and the OPA on a regular basis, ensuring actual savings are tracking established targets.

2. ACHIEVEMENTS / MILESTONES MET

Direct Install Programs and the Commercial Lighting Incentive Program continue to deliver robust energy savings. A generous new residential Insulation rebate offer was added to the Consumer Rebate Program in September 2018, targeting older, poorly insulated residential buildings.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

FY 17-18 cumulative energy savings exceeded the target.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

ES staffing vacancies continue to be filled in the first months of FY 2018-19, ensuring that incentive delivery will keep pace with participant demand and new programs will proceed into the delivery pipeline

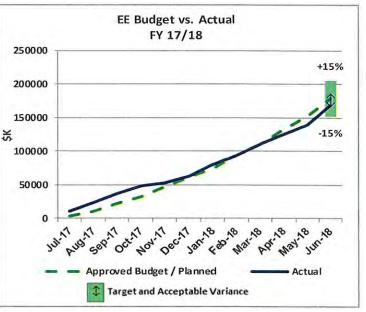
LADWP RATES METRIC – BUDGET VARIANCE ENERGY EFFICIENCY (JOINT) RESPONSIBLE MANAGER: David Facot FW D.) REPORTING PERIOD: June 2018

56

DEFINITION OF RATES METRIC: Budget vs. Actual for the overall Energy Efficiency Portfolio TARGET & ACCEPTABLE VARIANCE (FY 17/18): +/- 15%

STATUS: Within Acceptable Variance

FYTD	Approved Budget /	Actual	Actual		Re-Estimate
as of:	Planned		Unit or \$	%	(If Applicable)
Jul-17	3,649	10,175	6526	178.8%	
Aug-17	10,831	23,097	12266	113.2%	
Sep-17	21,546	36,325	14779	68.6%	
Oct-17	32,262	48,199	15937	49.4%	
Nov-17	46,511	52,204	5693	12.2%	
Dec-17	60,760	62,063	1303	2.1%	
Jan-18	75,009	80,254	5245	7.0%	
Feb-18	92,792	92,932	140	0.2%	
Mar-18	110,575	109,954	-621	-0.6%	
Apr-18	131,891	124,869	-7022	-5.3%	
May-18	153,207	139374	-13833	-9.0%	
Jun-18	178,057	168077	-9980	-5.6%	168,055
	Acceptabl	e Variance	±	15%	-5.6%



SOURCE OF DATA: FI Y5002, Y5003, Y5014, Y7718, Y7720, Y7721

1. BACKGROUND / PURPOSE

Efficiency Solutions' (ES) energy savings goals are a key performance metric related to the Energy Cost Adjustment Factor, a critical power rate component. Energy Savings are compiled monthly into a Key Performance Indicators database encompassing measures installed by participants in ES programs and initiatives. The OPA has requested this metric be reported to the Board and the OPA on a regular basis, ensuring actual spending to meet the Energy Efficiency targets are tracking to established budgets.

2. ACHIEVEMENTS / MILESTONES MET

- Actual ES charges and payments tracked within 6% of expenditure targets for 2017-18.
- New Community Partnership grants have . been awarded for program outreach.
- Consumer Rebate Program now receiving applications for the new residential Insulation measures.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- CLIP participation met expectations for 2017-2018 but may decrease next FY as CDI program absorbs some formerly CLIPeligible customers.
- CDI program expenditures remain high due to shift of eligibility allowing participation from more medium -size business customers.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

Continue ramp up of planned EE programs, including Phase II of the Residential Insulation Program and a launch of the Upstream Commercial Food Service Program.

LADWP RATES METRIC – *Levelized EE Program Costs (\$/KWH) (Joint)*

RESPONSIBLE MANAGER: David Jacot For DJ

REPORTING PERIOD: May-2018 thru June-2018

DEFINITION OF RATES METRIC: Cost per kWh over lifetime of installed energy efficiency solutions or measures. **TARGET & ACCEPTABLE VARIANCE (FY 17/18):** Annual metric: Levelized Cost \$.0.082 +/- 15%

STATUS Within Acceptable Variance

SOURCE OF DATA: E3 Report for FY 17/18

1. BACKGROUND / PURPOSE

Efficiency Solutions' (ES) Levelized EE Program costs (\$/kWh) are a key performance metric related to the Energy Cost Adjustment Factor, a key rate component. The OPA has requested this metric be reported to the Board and the OPA on a regular basis, ensuring actual Levelized EE Program costs are tracking established targets.

Life of efficiency measures vary from one to thirty years. The Levelized cost of LADWP's efficiency program portfolio is calculated once per year using the Energy Efficiency Reporting Tool developed by Environmental Economics (E3) and KEMA and is used by all SCPPA members in reporting annual energy savings and expenditures to the California Energy Commission (CEC).

2. ACHIEVEMENTS / MILESTONES MET

The Levelized cost of LADWP's energy efficiency portfolio for FY 16-17 was \$0.0242 per kWh saved resulting in a variance of -70.5% from the established \$0.082 FY 16-17 target.

3. <u>PERFORMANCE / VARIANCE ANALYSIS</u> <u>& YEAR END PROJECTION</u>

LADWP's portfolio of energy efficiency programs has historically been very cost effective.

For FY 17-18 we expect our EE Program portfolio Levelized cost to increase as our spending on upstream and direct install programs increase. We expect it to come in well below the \$0.082 target.

4. <u>MITIGATION PLAN AND / OR</u> <u>RECOMMENDATIONS</u>

Continue ramp up of planned EE programs, including Phase II of the Residential Insulation Program and a launch of the Upstream Commercial Food Service Program.

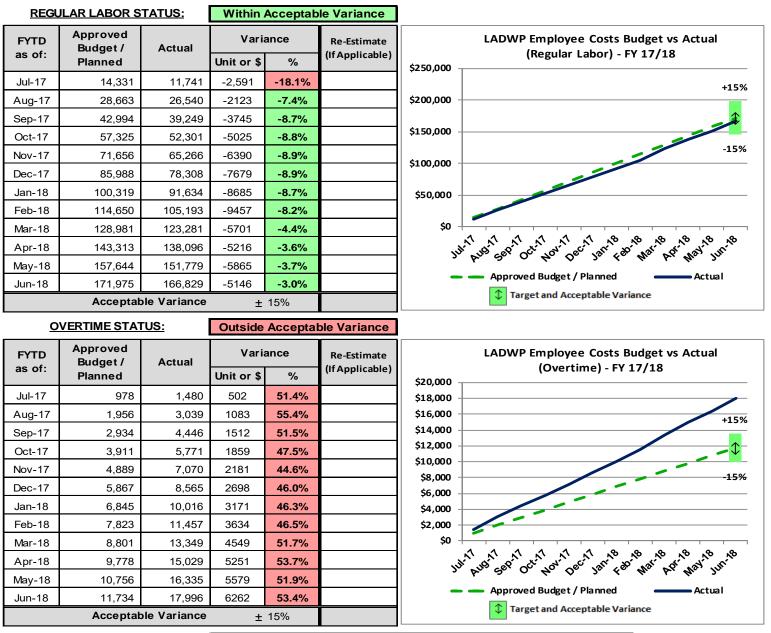
LADWP Employee Costs Budget vs. Actual (\$M) Detail

LADWP RATES METRIC – *LADWP EMPLOYEE COST BUDGET VS. ACTUAL* (Chief Administrative Officer)

RESPONSIBLE MANAGER: Donna Stevener

REPORTING PERIOD: June 2018

DEFINITION OF RATES METRIC: LADWP CAO employee costs (including regular labor, overtime, pension and healthcare, excluding daily exempt and Utility Pre-Craft Trainee) budget vs. actual (\$M) **TARGET & ACCEPTABLE VARIANCE (FY 17/18):** +/- 15%



Employee Cost Category	Budget	Actual	Variance	Variance %	FY 17/18 Approved
Regular Labor	171,975	166,829	-5,146	-3%	171,975
Overtime	11,734	17,996	6,262	53%	11,734
Regular Labor + Overtime	183,709	184,825	1,115	1%	183,709
Health Care Allocation	50,407	47,710	-2,698	-5%	50,407
Retirement & Death Benefit	80,051	70,528	-9,524	-12%	80,051
Total	314,168	303,062	-11,106	-3.5%	314,168

Chief Administrative Officer (CAO) organizations include Business Support Services, Customer Billing and Systems Support (CBSS), Equal Employment Opportunity Services (EEOS), Human Resources (HR), Labor Relations Office, Information Technology Services (ITS), Leadership in Energy and Efficiency Design, Meter Services and Field Operations (MSFO), Real Estate Services (RES), and Supply Chain Services (SCS).

The purpose of these organizations include operations in general administrative support, equal employment training and investigations, purchasing and material services, information technology support and cyber security, work space management and planning, employment services, labor relations, customer billing, and metering and field support .

The net overall variance for fiscal year 2017 - 2018 is1% over target; the 53% overrun in overtime is offset by saving of 3% in regular labor, 12% in pension, and 5% in healthcare.

2. ACHIEVEMENTS / MILESTONES MET

- EEOS completed the coordination and monitoring of mandatory Sexual Harassment training for all employees and has issued a Request for Proposal for development and delivery of a 4-hour interactive EEO and Americans with Disability Act training.
- HR's Recruitment continued outreach for female and diversity hiring with 109 interviews for Engineering Associates at regional and national conferences. Additionally, 62 exam requests were submitted and 250 new employees were hired.
- Several ITS operations

 including Telecommunications and Network
 Services, Network Operations, Voice Operations,
 Network Engineering, and Cyber Security
 maintaining network connectivity, integrity,
 monitoring and responding to critical LADWP
 systems.
- MSFO and CBSS have cleared backlogs of field investigations and processing settlement claims. The Financial Support Unit has hired Utility Accountants to address the backlogs.

 SCS warehouse workers providing support for Power Reliability Program and other projects in Power and Water systems.

3. <u>PERFORMANCE / VARIANCE ANALYSIS</u> <u>& YEAR END PROJECTION</u>

- CBSS and MSFO incurred overtime to address workload due to employee transfers/promotions, and retirements.
- ITS groups operate on a 24/7 basis or after regular hours and responded to security access control issues and cable/fiber installations for Water and Power systems. ITS overtime is used to address critical and urgent issues in general network communications, radio and fiber optic systems, as well as provide off-hour support for data centers.
- HR had a savings in overtime due to new process efficiencies and more experienced employees performing duties, as well as needing to delay some projects to future years.
- LRO's overrun in labor is due to a fully staffed group including two unfunded positions that were added to address compliance issues.
- RES required overtime to process requests from the public and to maintain up-to-date records vital to RES and LADWP.
- SCS warehouse staff is expected to be available whenever Power and Water system crews are working causing overtime to be overrun.

4. <u>MITIGATION PLAN AND / OR</u> <u>RECOMMENDATIONS</u>

- CAO is working with all CAO organizations to monitor expenditures and budget overtime at realistic levels.
- CBSS, EEOS, ITS, MSFO and RES have submitted exam and cert requests and are working on filling vacancies and positions in anticipation for succession planning, to reduce the need for overtime for future years.
- SCS will continue to work with customers to identify ways to minimize overtime while continuing to provide the required services for future fiscal years.
- RES is reviewing its projects to evaluate if some can be contracted out in future years to address overtime overruns.

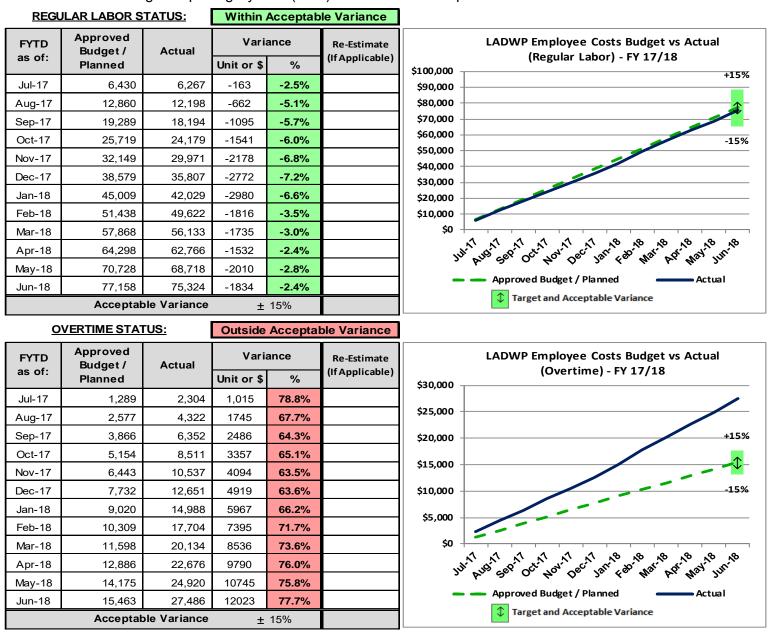


LADWP RATES METRIC – *LADWP EMPLOYEE COST BUDGET VS. ACTUAL* (Chief Operating Officer)

RESPONSIBLE MANAGER: Martin Adams

REPORTING PERIOD: June 2018

DEFINITION OF RATES METRIC: LADWP COO employee costs (including regular labor, overtime, pension and healthcare, excluding daily exempt and Utility Pre-Craft Trainee) budget vs. actual (\$M) **TARGET & ACCEPTABLE VARIANCE (FY 17/18):** +/- 15%



		YTD as of June 2018			
Employee Cost Category	Budget	Actual	Variance	Variance %	FY 17/18 Approved
Regular Labor	77,158	75,324	-1,834	-2%	77,158
Overtime	15,463	27,486	12,023	78%	15,463
Regular Labor + Overtime	92,621	102,810	10,189	11%	92,621
Health Care Allocation	22,652	24,317	1,665	7%	22,652
Retirement & Death Benefit	35,965	33,522	-2,443	-7%	35,965
Total	151,238	160,649	9,411	6.2%	151,238

Provide security, emergency management, facilities support (custodial, landscape, vector control, locksmith, building maintenance/repair), fleet, helicopter, film coordination, ID badging, internal investigations, whistleblower complaints, and ethics services to the LADWP; provide secretarial and administrative support to the COO.

Reorganization of various functions such as FMOSS resulted in inadequate positions moved to the COO's Organization.

2. ACHIEVEMENTS / MILESTONES MET

Security updated/facilitated the JFB Occupant Training Program and supported a significant number of special projects and infrastructure repairs for both the Water and Power Systems. Group also supported emergency response to the DS 49 explosion and deployment of the Emergency Command Post Vehicle. Investigated 77 cases involving employees/contractors, of which 60 were closed and managed 40 security engineering projects.

Fleet Services developed new specification language to streamline and expedite equipment purchases. Labor component was added to parts/material contracts so major repairs/modifications contracted out. GPS was introduced to several equipment pieces to identify efficiencies/improve utilization. Fleet Engineering implemented the Project Manager pilot program to streamline replacement schedules, avoid costly repairs, identify/justify order quantities that will help eliminate the equipment procurement backlog, and provide replacements with maximum return on investments and mitigate negative impact due to aging equipment. Fleet's Asset Management program upgrades are 90% ready to be awarded.

Facilities Maintenance Operations Support Services (FMOSS) completed installation of drought tolerant landscapes at 16 facilities, yielding 33,912 sq. ft of turf removal, 216, 749 sq. ft of drought tolerant landscape, 6,562,470 gallons of water saved annually. Staff repaired the 1/4/18 DS-90 water main break by 1/20/18.

COO's Executive Office achieved significant progress in the regulatory process to update the LADWP's Conflict of Interest Code with anticipation completion date in FY 2018/19. Implemented and conducted seven training sessions to reduce errors and improve processing rates for forms needing COO approval. Coordinated with the GM's and COO's direct reporting entities to achieve 100% compliance rate for mandatory Cybersecurity Awareness Training and Sexual Harassment Awareness/Prevention training. Coordinated important meetings with key external stakeholders. Increased efficiencies for documents requiring COO approval and enhancing tracking system.

3. <u>PERFORMANCE / VARIANCE ANALYSIS</u> <u>& YEAR END PROJECTION</u>

Overtime expenditures increased through yearend due to increased workload, aging and expanding infrastructure, attrition, long term absences, new MOU OT provisions, emergencies, gaps in contract renewals, and new major projects.

4. <u>MITIGATION PLAN AND / OR</u> <u>RECOMMENDATIONS</u>

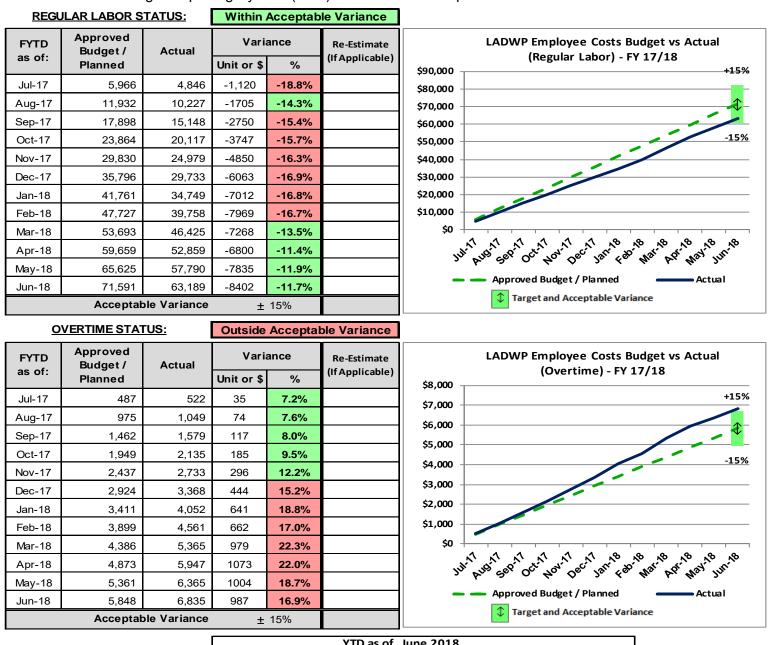
Work to fill vacancies and cross train new staff to raise productivity levels; obtain/fill new positions; implement a new recruitment/hiring process for entry level Custodian positions (exam is no longer given); increase funding to meet actual OT projections in FY 2018/19; replace staff with technology where possible; expedite contract awards for replacement of aging Fleet vehicles; consider contract labor.

LADWP RATES METRIC – *LADWP EMPLOYEE COST BUDGET VS. ACTUAL* (Customer Service)

RESPONSIBLE MANAGER: Sharon Grove

REPORTING PERIOD: June 2018

DEFINITION OF RATES METRIC: LADWP Customer Service employee costs (including regular labor, overtime, pension and healthcare, excluding daily exempt and Utility Pre-Craft Trainee) budget vs. actual (\$M) **TARGET & ACCEPTABLE VARIANCE (FY 17/18):** +/- 15%



		YTD as of June 2018			
Employee Cost Category	Budget	Actual	Variance	Variance %	FY 17/18 Approved
Regular Labor	71,591	63,189	-8,402	-12%	71,591
Overtime	5,848	6,835	987	17%	5,848
Regular Labor + Overtime	77,439	70,024	-7,416	-10%	77,439
Health Care Allocation	21,017	18,349	-2,669	-13%	21,017
Retirement & Death Benefit	33,369	27,327	-6,043	-18%	33,369
Total	131,826	115,699	-16,127	-12.2%	131,826

 This metric is to assess labor and overtime for Customer Service Division, which includes the Executive Office, Administrative Services Office, Customer Contact Center, Customer Service Centers, Customer Services Support, Employee Development & Training, Energy Efficiency-Mass Market, Key Accounts, Low Income & Multiple Family Dwellings, Revenue & Credit Management, and Water Conservation.

2. ACHIEVEMENTS / MILESTONES MET

- In the months of May and June 2018, CSD had filled 31 positions; which totaled up to 224 in FY 17-18.
- No additional emergency/limited appointments were made during these last 2 months.
- As of year-end 2017-18, CSD still has 8 limited CSRs and 60 on emergency appointments working in the division.

3. <u>PERFORMANCE / VARIANCE ANALYSIS</u> <u>& YEAR END PROJECTION</u>

- In May and June 2018, CSD's regular labor expenditure was within the acceptable variance threshold; with continuous overspending in overtime due to 15.8% staff vacancies, as of June 30, 2018.
- A review of the CSR examination process to ensure its alignment with current operational goals and objectives led to a delay in the examination process, which resulted in a temporary absence of an available CSR certification list and a hiring delay. In addition, new CSR training takes 3 to 4 months before the new hires are able to assist with customer calls, which will delay the impact on overtime.

4. <u>MITIGATION PLAN AND / OR</u> <u>RECOMMENDATIONS</u>

- CSD will resume hiring regular CSR positions in August 2018, and CSD cert'd for 88 positions from the new CERT list, to replace the emergency appointments ending in February 2019. This mass hiring event will take place on August 25, 2018.
- CSD will continue to be proactive in making exam requests for various positions ahead of anticipated list expiration date; including CSR, CSS, OSRA, SUSS, USM, USS etc.
- CSD is utilizing limited and emergency appointments to fill up vacancies until eligible lists are established.

Within Acceptable Variance

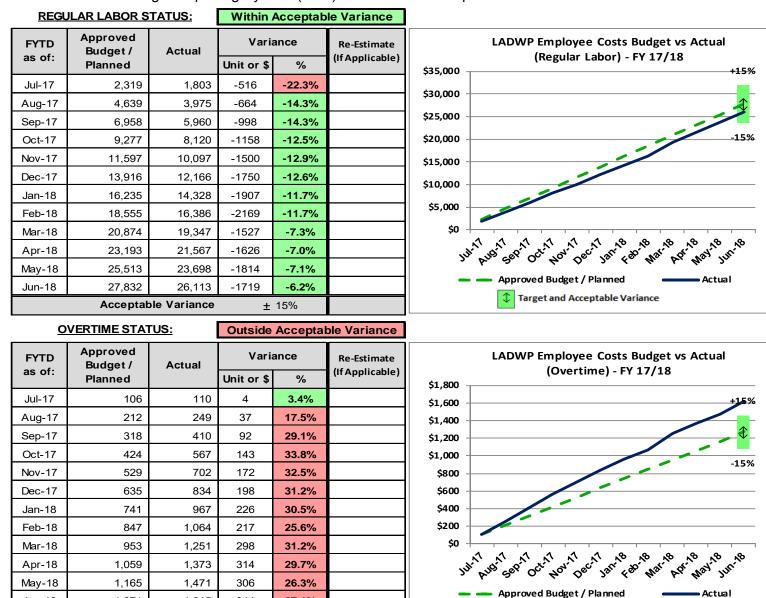
LADWP RATES METRIC – *LADWP EMPLOYEE COST BUDGET VS. ACTUAL* (Financial Services Organization)

RESPONSIBLE MANAGER: Ann Santilli

REPORTING PERIOD: June 2018

DEFINITION OF RATES METRIC: LADWP FSO employee costs (including regular labor, overtime, pension and healthcare, excluding daily exempt and Utility Pre-Craft Trainee) budget vs. actual (\$M) **TARGET & ACCEPTABLE VARIANCE (FY 17/18):** +/- 15%

SOURCE OF DATA: Budget Reporting System (BRS) - Rates Metrics Report



Target and Acceptable Variance

		YTD as of June 2018			
Employee Cost Category	Budget	Actual	Variance	Variance %	FY 17/18 Approved
Regular Labor	27,832	26,113	-1,719	-6%	27,832
Overtime	1,271	1,615	344	27%	1,271
Regular Labor + Overtime	29,102	27,728	-1,375	-5%	29,102
Health Care Allocation	8,163	7,955	-208	-3%	8,163
Retirement & Death Benefit	12,967	13,758	791	6%	12,967
Total	50,232	49,441	-791	-1.6%	50,232

1,271

Acceptable Variance

1,615

344

27.1%

± 15%

Jun-18

- This is an analysis of the regular labor and overtime expenditures for the following Divisions in FSO:
 - Org 21 Financial Services Exec Office
 - Org 22 Accounting and Financial Reporting
 - Org 23 Budget, Rates, Fin. Planning, and Fin. System Replacement
 - $\circ \quad \text{Org 25}-\text{Finance and Risk Control}$
 - Org 26 Internal Audit
 - o Org 28 Corporate Performance

2. ACHIEVEMENTS / MILESTONES MET

• Accounts Payable

- Drastically reduced overtime in the past fiscal year due to expedited backfilling of vacancies.
- Supervision has also been proactive in holding staff accountable by monitoring productivity metrics on a weekly basis.
- Currently have a twelve month discount capture rate of 90%.

Cashier's Office

- Cash balancing was stabilized four years after implementation of CCB.
- \$15M variance was identified and reconciled.
- Printed 30K refund checks in support of the Bulk Refund Process associated with the CCB settlement.

• Financial Systems Replacement (FSR)

- Laid out the overall action items to be accomplished as part of the Enterprise Resource Planning (ERP) organizational readiness activities.
- Analyzed the approach, deliverables, and estimated due dates for each action item.
- Prepared standard documentation templates for ERP readiness activities.
- Filled fourteen vacancies in FSR by the end of December 2017.
- Formed six groups within FSR to cover all finance modules within ERP.
- Conducted numerous training sessions to get the team ready for the work plan.

- Solicited follow-up questions from FSO for ERP software demo Part II.
- Facilitated ERP software vendor demo Part II. All SMEs were invited to participate in the deeper dive of software functionality.
- Team started business process documentation through SWOT analysis, FSO manual review, and communication with SMEs. First progress report meeting with FSO was conducted in April, 2018.
- Participated in GFOA training for ERP project in Mid April, 2018.
- Started flowcharting the As-Is End-to-End Business Process in collaboration with SMEs for all modules - with the exception of payroll and timekeeping.
- Conducted six presentations in May and June during the second round of FSO progress report meetings with participation from the CPMO.
- Started reviewing FERC's & CPUC's Uniform System of Accounts for potential redesigning of the chart of accounts.
- Started reviewing the Cost Difference Register (CDR) issues prevalent in the A/P process.
- Developed timecode matrix with Payroll SME's to document timekeeping rules.
- Drafted the End-to-End business process signoff package.
- Started participating in the weekly chaining logic training conducted by IT Payroll.
- Payroll
 - Implemented New MOU contract for 10/1/2017 and 12/1/2017 for IBEW. This new contract had many new changes. Rules have changed for three Bargaining Units. Extensive reprogramming and new types of time needed to be created to cover this. This creation and development took a lot of coordination with IT and testing.

- Completed Year-end processing and related payments for unused sick and B-Time.
- Completed processing and distribution of approximately 12,000 W2s.
- Implemented New MOU contract for 10/1/2017 and 12/1/2017 and 1/1/18 for Load Dispatchers Association. This new contract had many new changes. As there is a me to clause for LDA related to IBEW new overtime rules. A lot of reprogramming and new types of time needed to be created to cover this. This creation and development took a lot of coordination with IT and testing.
- Implemented New MOU contract for MEA with retroactive payments -1/1/2017, 10/1/2017 and 12/1/2017. A lot of work was required to process this implementation with the 3 retroactive payments.
- Implemented New MOU contract for Unrepresented employees with retroactive payments from 6/16 and 6/17.
- Implemented 6/18 COLA for Unrepresented employees – Bargaining Unit V.
- Implemented new deduction for women Engineers.
- Implemented new pay adjustment for Excess Benefit Arrangement - For Retirement Office for Retirees (IRS Regulation).
- Rates, Contracts, and Rates Technology
 - Along with Power System, worked with MTA to analyze and clarify demand charge application for their operations. Established proposed terms and conditions for possible MTA Agreement.
 - 40 eligible customers for special XCD rate were identified to allow opportunity for these large C&I customers to lower their electric rates.
 - Continue working with Key Account Managers to implement Summer Shift program for Summer 2018.

- Supported load curtailment calls for Summer 2018 with the following load reductions: (Mandatory) 7/6/18 - 45 MW; (Voluntary) 7/23/18 - 36 MW; (Mandatory) 7/25/18 - 45 MW; (Voluntary) 8/7/18 - 37.5 MW; (Voluntary) 8/9/18 - 37.3 MW.
- Continue to support special billing and data collection for up to 40% of our top electric customers through PBS.
- Support associated renewal of special electric contracts (12 XCD, 1 XRT, 1 AMP, 7 Combo) including new standard agreement for renewables currently under review.
- Completed Rates Consulting Services, and Marginal Cost Study and Benchmarking Services Contracts to support the Interim Water and Power Rates Review. Obtained Board approval on July 24, Energy Climate Change and Environmental Justice Committee approval on August 7 and Council approval on August 24.
- Rates Application Technology and Maintenance RFP evaluation completed to support web-based applications that provide information to LADWP customers on rates and other information.
- Completed Shared Solar Rate Design with rates based upon total cost of service and methodology to be presented to Board on 9/25/18.
- October 1, 2018 Power Quarterly Factors were issued to IT for CCB programming.
- Updated Rate Calculation worksheets for bill testing to reflect Oct 1 quarterly rate factor changes.
- Volume tested CCB with the July quarterly rate factors before July 1 go live.
- Completed PowerPoint presentations for explanation of proration in Electric and Water Bill Calculation method in CCB.
- Completed update of Rates Annual Report (Briefing Book).

Exceeds Target

- Completed electric vehicle (EV) report for CARB containing total consumption, average daily use, number of EV customers.
- Completed Water Loss Task Force containing prorated FY18 consumption by class and by meter size, total number of monthly bills and number of estimated bills, list of active meters and random selection for meter testing.
- Completed MWD turf data containing water consumption for a specific list of customers participating in turf data study from 2000 to present.

3. <u>PERFORMANCE / VARIANCE ANALYSIS</u> <u>& YEAR END PROJECTION</u>

• Accounts Payable

 Recently backfilled 6 vacancies and now started the training of these new staff members. Currently have 2 employees out on extended leaves. Extra overtime has been needed to process invoices timely and keep our capture rate of discounts in the 85% to 90% range due to the vacancies. Additional over time was approved for year-end processing and the shortage of staff due to the recent promotions. Will continue training new hires.

• Cashier's Office

- Overtime was increased to cover staff shortages to meet daily operations. With two new staff, overtime was needed due to learning curve and vacation coverage.
- OT required in order to meet the time sensitivity of printing, folding, and mailing of the bulk refund checks for the month of March.
- SUA-C attended classes several days per week for the months of April, May, and June to complete the supervisory certificate series.

• Financial Systems Replacement

 Actual regular labor expense is below budget on year-to-date basis, because the hiring process was substantially completed in late December 2017.

- Overtime labor is below budget because the RFP for ERP software and system integrator is not yet released.
- Payroll
 - Overtime has increased this fiscal year due to:
 - Two vacant positions. One SAC has been backfilled. Staff has been given extra overtime during these vacancies and training of new employee.
 - Extensive reprogramming and new types of time needed to be created to cover New MOU contract. This creation and development took a lot of coordination with IT and testing.
 - Year-end processing and related payments for unused sick and B-Time.
 - W2 processing and distribution.
 - New MOU contract for MEA 3 implementation and retroactive payments - 1/1/2017, 10/1/2017 and 12/1/2017. A lot of work was required to process this implementation and 3 retroactive payments.
 - Additional overtime was needed to implement COLA/contracts for Unrepresented Classes for 6/16 and 6/17 and retroactive pay for the two years.
 - Additional overtime was needed for 3 new projects, New Deduction for Women Engineers Completed and implemented, Excess Benefit Arrangement - pay adjustment completed and implemented, and new employee deduction related to JSI/JTI .43% of hours worked, continuing the programming and testing. This needs to be completed by 10/1/2018.
 - Additional overtime may be needed for Securities upcoming contract, as

well as 10/1/2018 COLA for IBEW, MEA, ACE, and LDA.

Rates, Contracts, and Rates Technology

 Actual labor is lower than budgeted due to four vacant positions which resulted in an increase in overtime. Two positions have recently been filled in June and remaining two vacancies were filled as of September 3.

4. <u>MITIGATION PLAN AND / OR</u> <u>RECOMMENDATIONS</u>

- Accounts Payable
 - Continue training new hires and work on backfilling the vacant PCU-A position.
- Cashier's Office
 - Work towards training new staff and stabilizing work force in Cashier. SUA-C position filled 12/26/17. UA-B position filled 11/2/17.
- Financial Systems Replacement
 - Most vacancies have been filled as of December 2017. Therefore, actual labor expense should be closely aligned with budget going forward. Overtime labor is dependent on the actual release of ERP RFPs. However, the Payroll team has been working overtime to capture the timekeeping rules.
- Payroll
 - Continue to train new employee and backfill last vacant position.
- Rates, Contracts, and Rates Technology
 - The labor and overtime will be closely aligned with budget since the four vacant positions were filled.
 - The labor and overtime may be impacted by the Water and Power Rate Review activities.

Within Acceptable Variance

LADWP RATES METRIC – *LADWP EMPLOYEE COST BUDGET VS. ACTUAL* (Commission Office)

RESPONSIBLE MANAGER:

OVERTIME STATUS:

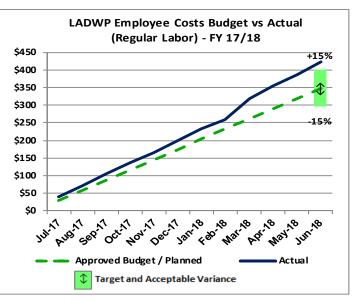
REPORTING PERIOD: June 2018

DEFINITION OF RATES METRIC: LADWP Commission Office employee costs (including regular labor, overtime, pension and healthcare, excluding daily exempt and Utility Pre-Craft Trainee) budget vs. actual (\$M) **TARGET & ACCEPTABLE VARIANCE (FY 17/18):** +/- 15%

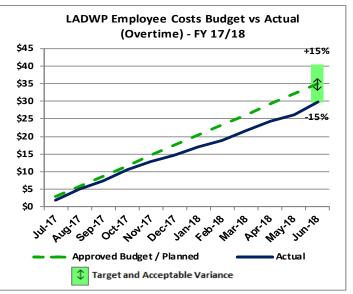
SOURCE OF DATA: Budget Reporting System (BRS) - Rates Metrics Report

Exceeds Target

REGL	JLAR LABOR S	• •	Outside Acceptable Variance		
FYTD	Approved Budget /	Actual	Varia	ance	Re-Estimate
as of:	Planned		Unit or \$	%	(If Applicable)
Jul-17	29	39	10	33.8%	
Aug-17	58	72	14	23.8%	
Sep-17	87	106	19	21.5%	
Oct-17	116	137	21	18.3%	
Nov-17	145	166	21	14.7%	
Dec-17	174	200	26	15.0%	
Jan-18	203	234	31	15.1%	
Feb-18	232	258	26	11.2%	
Mar-18	261	318	57	21.8%	
Apr-18	290	355	65	22.4%	
May-18	319	388	69	21.6%	
Jun-18	348	422	75	21.4%	



Approved Variance FYTD **Re-Estimate** Budget / Actual as of: (If Applicable) Unit or \$ Planned % 3 2 -38.3% Jul-17 -1 5 6 -1 -14.3% Aug-17 8 Sep-17 9 -1 -14.3% 11 -10.0% Oct-17 12 -1 13 -2 Nov-17 15 -11.5% 18 15 Dec-17 -3 -16.0% 20 17 -3 Jan-18 -16.7% Feb-18 23 19 -4 -19.0% Mar-18 26 22 -5 -17.7% -5 -16.7% Apr-18 29 24 May-18 32 26 -6 -18.6% Jun-18 -15.1% 35 30 -5 Acceptable Variance ± 15%



Employee Cost Category	Budget	Actual	Variance	Variance %	FY 17/18 Approved
Regular Labor	348	422	75	21%	348
Overtime	35	30	-5	-15%	35
Regular Labor + Overtime	383	452	69	18%	383
Health Care Allocation	102	128	26	25%	102
Retirement & Death Benefit	162	190	28	17%	162
Total	647	770	123	19.0%	647

Support to LADWP Board of Commissioners, Commission agenda, meetings, and after meeting documents processing.

The net overall variance for Labor and Overtime in the 2017-2018 fiscal year is 18%: Regular labor is 21% over run offset by overtime savings which is 15% under run.

2. ACHIEVEMENTS / MILESTONES MET

Timely processing of agendas, resolutions, back up documents, and documents for Mayor and Council approvals.

The Commission Office is in the process of scanning/transferring Board minutes in bound books from 1902 to 1999 from physical to searchable electronic copies that will be made available to the public via <u>www.ladwp.com</u>.

3. <u>PERFORMANCE / VARIANCE ANALYSIS</u> <u>& YEAR END PROJECTION</u>

The expenditure pattern continued throughout the fiscal year.

Regular labor increased slightly to address Board meeting deadlines and requests for documents from Commissioners.

4. <u>MITIGATION PLAN AND / OR</u> <u>RECOMMENDATIONS</u>

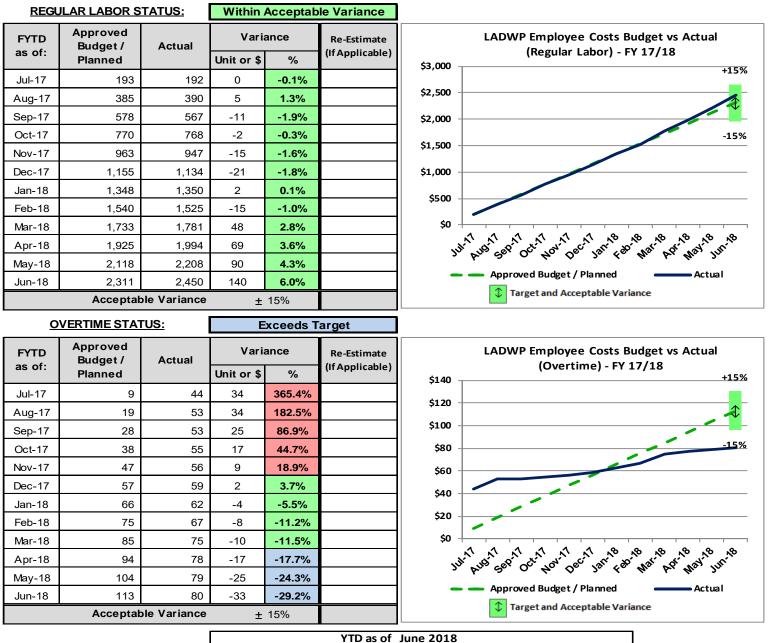
The Commission Office will make necessary revisions to the budget to be on target with labor and overtime funding.

LADWP RATES METRIC – LADWP EMPLOYEE COST BUDGET VS. ACTUAL (Office of City Attorney)

RESPONSIBLE MANAGER:

REPORTING PERIOD: June 2018

DEFINITION OF RATES METRIC: LADWP Office of City Attorney employee costs (including regular labor, overtime, pension and healthcare, excluding daily exempt and Utility Pre-Craft Trainee) budget vs. actual (\$M) **TARGET & ACCEPTABLE VARIANCE (FY 17/18):** +/- 15%



Employee Cost Category	Budget	Actual	Variance	Variance %	FY 17/18 Approved
Regular Labor	2,311	2,450	140	6%	2,311
Overtime	113	80	-33	-29%	113
Regular Labor + Overtime	2,424	2,530	107	4%	2,424
Health Care Allocation	678	718	40	6%	678
Retirement & Death Benefit	1,077	1,070	-8	-1%	1,077
Total	4,179	4,318	139	3.3%	4,179

The Office of the City Attorney provides legal support and counsel to the LADWP.

The net overall variance for Labor and Overtime in the 2017-2018 fiscal year is 4%. Regular labor is 6% over offset by savings of a 29% underrun in overtime.

2. ACHIEVEMENTS / MILESTONES MET

Providing legal advice and guidance to the Los Angeles Department of Water and Power, Board, and employees in transactions and civil litigation.

The City Attorney's Office continues to work towards reducing overtime worked.

3. <u>PERFORMANCE / VARIANCE ANALYSIS</u> <u>& YEAR END PROJECTION</u>

Overall negative variance in overtime is due to hiring staff for succession planning to perform critical tasks.

Due to increase in staff, less overtime is needed to complete tasks and exceeded the overall overtime budget target.

4. <u>MITIGATION PLAN AND / OR</u> <u>RECOMMENDATIONS</u>

The City Attorney's Office will estimate more accurately in future budgets for overtime.

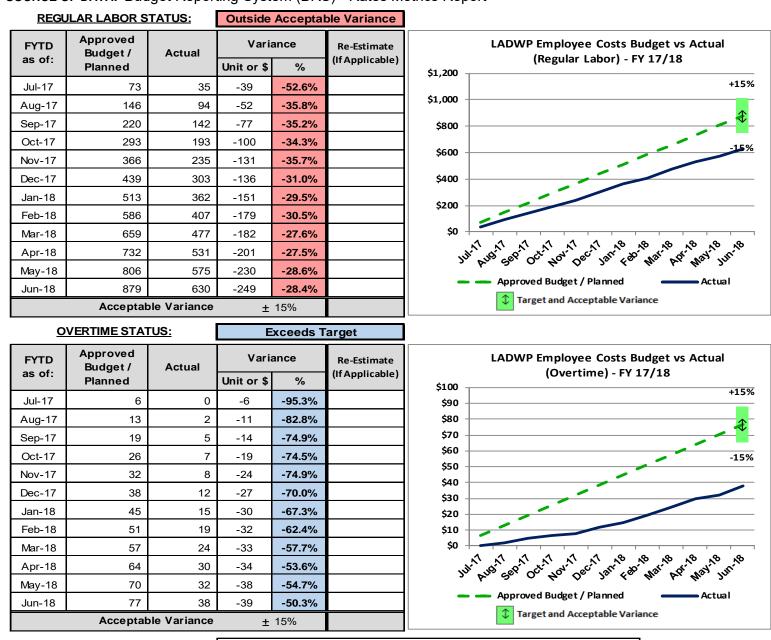
Within Acceptable Variance

LADWP RATES METRIC – *LADWP EMPLOYEE COST BUDGET VS. ACTUAL* (General Manager's Office)

RESPONSIBLE MANAGER:

REPORTING PERIOD: June 2018

DEFINITION OF RATES METRIC: LADWP General Manager's Office employee costs (including regular labor, overtime, pension and healthcare, excluding daily exempt and Utility Pre-Craft Trainee) budget vs. actual (\$M) **TARGET & ACCEPTABLE VARIANCE (FY 17/18):** +/- 15%



		YTD as of June 2018				
Employee Cost Category	Budget	Actual	Variance	Variance %	FY 17/18 Approved	
Regular Labor	879	630	-249	-28%	879	
Overtime	77	38	-39	-50%	77	
Regular Labor + Overtime	956	668	-288	-30%	956	
Health Care Allocation	258	308	50	20%	258	
Retirement & Death Benefit	410	461	51	13%	410	
Total	1,623	1,437	-186	-11.5%	1,623	

Support for General Manager and Department operations.

Process items for LADWP Board meeting agendas. Work with Power, Water, and Joint systems. Provide guidance on procedures and policies.

The net overall variance for Labor and Overtime in the 2017-2018 fiscal year is 30% under target: Regular labor is 28% underrun for regular labor and 50% underrun for overtime.

2. ACHIEVEMENTS / MILESTONES MET

The successful coordination and implementation of projects and assignments between LADWP systems.

3. <u>PERFORMANCE / VARIANCE ANALYSIS</u> <u>& YEAR END PROJECTION</u>

The expenditure pattern continued throughout the fiscal year.

Regular labor and overtime continued to decrease due to vacancies not filled in the 2017-2018 fiscal year.

4. <u>MITIGATION PLAN AND / OR</u> <u>RECOMMENDATIONS</u>

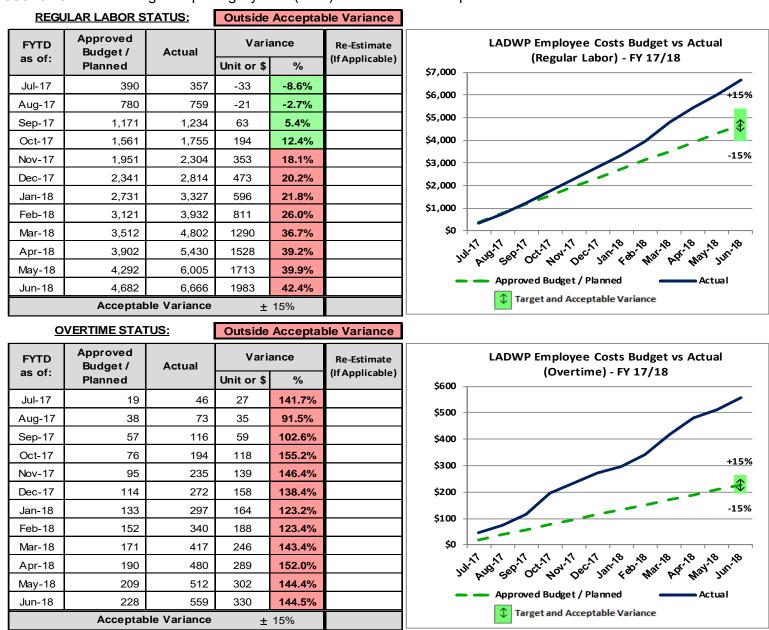
Fill necessary vacancies to reduce underruns in regular labor and re-estimate labor and overtime to a lower rate that is in-line with actuals in future fiscal years.

LADWP RATES METRIC – *LADWP EMPLOYEE COST BUDGET VS. ACTUAL* (*Public Affairs*)

RESPONSIBLE MANAGER: Joseph Ramallo

REPORTING PERIOD: June 2018

DEFINITION OF RATES METRIC: LADWP Public Affairs employee costs (including regular labor, overtime, pension and healthcare, excluding daily exempt and Utility Pre-Craft Trainee) budget vs. actual (\$M) **TARGET & ACCEPTABLE VARIANCE (FY 17/18):** +/- 15%



Employee Cost Category	Budget	Actual	Variance	Variance %	FY 17/18 Approved
Regular Labor	4,682	6,666	1,983	42%	4,682
Overtime	228	559	330	145%	228
Regular Labor + Overtime	4,911	7,224	2,314	47%	4,911
Health Care Allocation	1,148	1,767	619	54%	1,148
Retirement & Death Benefit	1,823	2,647	825	45%	1,823
Total	7,881	11,638	3,757	47.7%	7,881

Communications, Media and Community Affairs (CMCA) is currently comprised of two minor orgs, 06100 Community Affairs and 06200 Communications and Media. As a result of the recent Re-Organization (effective September 4, 2017), Marketing and Economic Development Division is currently being housed in Minor Org 06100 until FY18/19.

2. <u>ACHIEVEMENTS / MILESTONES MET</u>

Some achievements during this, the final reporting period in FY17/18 include:

- **Community Affairs**: 143 community-based activities that include 111 community events, 30 community meetings and 2 Owens Valley tours.
- Corporate Communication: issued 25 news releases.
- **CPRA Administration**: 87 New CPRA Requests were opened.
- Advertising: There were 10 paid ads posted in support of key Department initiatives on Facebook (and Instagram) that included: \$400 customer rebate for HE washing machines, National Drive Electric Week event at LADWP headquarters, Heat Wave Tips, and Landscape Transformation Customer Classes. The washer rebate video garnered the highest number of impressions at 2,175,067, the most of any paid social campaign in LADWP history. Currently, LADWP has 32,658 followers on Facebook.
- **Marketing**: The top tweet for Q1 was the \$400 washer rebate "Heroic Savings," which earned 35,300 impressions. During Q4, LADWP garnered 1,852 new followers and earned 2,291,437 total mpressions. LADWP has 39,300 Twitter followers.

A portion of the activities performed by this group involve the participation, set-up and dismantling of exhibits, events and briefings for department and community sponsored programs. These events occur at various times during the day that requires the use of overtime given the limited staff. In addition, unexpected emergencies that impact both the water and power system are monitored by Communications employees responsible for daily call-outs and reporting.

Additional challenges are also being met with the recent revision of Article 9.1(e) (a) of the MOU for Bargaining Unit 8 – Operating, Maintenance and Service that governs overtime compensation for specific classifications.

3. <u>MITIGATION PLAN AND / OR</u> <u>RECOMMENDATIONS</u>

With the recent re-organization and expanded objectives, both Divisions are in the process of ramping up their hiring activities for additional staff to assist in the accomplishment of department re-branding and enhanced communication with our stakeholders.

The plan currently being pursued to mitigate the overtime variance anticipates accelerated hiring in the following areas:

- CPRA Administration 1 UA and 1 MA
- Community Affairs 2 Principal Public Relations Representatives, 1 Storekeeper and 2 Warehouse and Toolroom Worker (Staggered shifts to facilitate set-up and dismantling of exhibits, events and briefings)
- Corporate Communications –1 AV Tech
- Marketing 2 Principal Public Relations Representatives and 3 Public Relations Specialists

Increased Labor will be corrected by requesting additional funding and positions in future fiscal years.

PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

Within Acceptable Variance

LADWP RATES METRIC – *LADWP EMPLOYEE COST BUDGET VS. ACTUAL* (Office of Safety)

RESPONSIBLE MANAGER: Frank Naglich

REPORTING PERIOD: June 2018

DEFINITION OF RATES METRIC: LADWP Office of Safety employee costs (including regular labor, overtime, pension and healthcare, excluding daily exempt and Utility Pre-Craft Trainee) budget vs. actual (\$M) **TARGET & ACCEPTABLE VARIANCE (FY 17/18):** +/- 15%

Re-Estimate	ance	Varia	Actual	Approved Budget /	FYTD
(If Applicable)	%	Unit or \$		Planned	as of:
	-24.7%	-70	214	284	Jul-17
	-20.5%	-117	452	568	Aug-17
	-21.6%	-184	668	852	Sep-17
	-20.7%	-235	901	1,137	Oct-17
	-19.5%	-276	1,144	1,421	Nov-17
	-20.7%	-353	1,352	1,705	Dec-17
	-20.2%	-401	1,588	1,989	Jan-18
	-15.9%	-361	1,912	2,273	Feb-18
	-15.9%	-408	2,150	2,557	Mar-18
	-15.1%	-429	2,413	2,842	Apr-18
	-15.0%	-468	2,657	3,126	May-18
	-16.0%	-544	2,866	3,410	Jun-18
	15%	±	le Variance	Acceptat	
le Variance	Acceptab	Within	US:	VERTIME STAT	<u>0</u>
inc-Estimate		Budget/ Actual I		FYTD	
(If Applicable)	%	Unit or \$		Planned	as of:
	-11.2%	-2	16	18	Jul-17
	-23.2%	-8	28	36	Aug-17
	-10.6%	-6	48	54	Sep-17
	-12.8%	-9	62	72	Oct-17
	-20.0%	-18	72	90	Nov-17
	-25.8%	-28	80	107	Dec-17
	-22.8%	-29	97	125	Jan-18
	-16.5%	-24	120	143	Feb-18
	-14.6%	-24	138	161	Mar-18
	14.070				
	-10.5%	-19	160	179	Apr-18
		-19 -22	160 175	179 197	Apr-18 May-18
nate	Re-Estin	-20.5% -21.6% -20.7% -19.5% -20.7% -20.2% -15.9% -15.9% -15.9% -15.0% -15.0% -15.0% -15.0% -15.0% -15.0% -11.2% -23.2% -10.6% -23.2% -20.0% -25.8% -20.0% -25.8%	-117 -20.5% -184 -21.6% -235 -20.7% -276 -19.5% -353 -20.7% -353 -20.7% -401 -20.2% -401 -20.2% -401 -20.2% -401 -20.2% -401 -20.2% -401 -20.2% -401 -20.2% -401 -20.2% -408 -15.9% -408 -15.9% -468 -15.0% -544 -16.0% ±5% Within ×cceptat= Variant Variant -8 -2 -11.2% Re-Esting 1f Applic Unit or \$ % -2 -11.2% -8 -23.2% -9 -12.8% -18 -20.0% -28 -25.8%	452 -117 -20.5% 668 -184 -21.6% 901 -235 -20.7% 1,144 -276 -19.5% 1,352 -353 -20.7% 1,352 -353 -20.7% 1,352 -353 -20.7% 1,352 -353 -20.7% 1,352 -353 -20.7% 1,352 -353 -20.7% 1,352 -353 -20.7% 1,352 -353 -20.7% 1,352 -353 -20.7% 1,588 -401 -20.2% 1,912 -361 -15.9% 2,413 -429 -15.9% 2,657 -468 -15.0% 2,657 -468 -15.0% 2,866 -544 -16.0% CUS: Within -Cceptab Variance Matter Variance Re-Esting Matter -2 -11.2% Matter -8 -23.2% 16 -2 -11.2% 28 -8 -23	568 452 -117 -20.5% 852 668 -184 -21.6% 1,137 901 -235 -20.7% 1,421 1,144 -276 -19.5% 1,705 1,352 -353 -20.7% 1,989 1,588 -401 -20.2% 2,273 1,912 -361 -15.9% 2,557 2,150 -408 -15.9% 2,842 2,413 -429 -15.1% 3,126 2,657 -468 -15.0% 3,410 2,866 -544 -16.0% WERTIME STATUS: Within Acceptable Variance \pm 15% Veriance \pm 16% Actual 10 int or \$ % 18 16 -2 -11.2% 36 28 -8 -23.2% -25.8% 90 72

Employee Cost Category	Budget	Actual	Variance	Variance %	FY 17/18 Approved
Regular Labor	3,410	2,866	-544	-16%	3,410
Overtime	215	190	-25	-12%	215
Regular Labor + Overtime	3,625	3,056	-569	-16%	3,625
Health Care Allocation	1,001	916	-85	-9%	1,001
Retirement & Death Benefit	1,589	1,262	-327	-21%	1,589
Total	6,215	5,234	-981	-15.8%	6,215

1. BACKGROUND / PURPOSE

The Labor and Overtime data is for the following minor organizations in Org 69:

Org 69111 Office of Safety Exec Ofc & Admin Org 69100 Corporate Health and Safety Org 69200 Industrial Hygiene Org 69300 Safety Engineering

For Fiscal Year 17-18, the Office of Safety gained eight (8) funded substitute positions; increasing the total number of positions from 24 to 32.

2. ACHIEVEMENTS / MILESTONES MET

To fill the new vacant funded positions, the Office of Safety submitted examination requests to the Personnel Department for the Industrial Hygienist, Senior Industrial Hygienist, Safety Engineer and Safety Engineering Associate classifications. The exams were administered and lists have been established. Allocation and certification requests have been submitted and are awaiting their approval to proceed with hiring.

3. <u>PERFORMANCE / VARIANCE ANALYSIS</u> <u>& YEAR END PROJECTION</u>

Six of the eight funded substitute positions that were added this Fiscal Year to the Office of Safety are still vacant as of June 2018, resulting in the -16% variance to labor and overtime costs combined. Eligible lists were established during the first quarter of the 18/19 Fiscal Year and hiring will be taking place over the next few months.

4. <u>MITIGATION PLAN AND / OR</u> <u>RECOMMENDATIONS</u>

The Office is Safety has been completing all the necessary requirements to fully staff the organization and fill any existing vacancies. Overtime is currently being utilized for those programs that are immediately needed and putting on hold those programs that will be addressed once additional staff is hired.

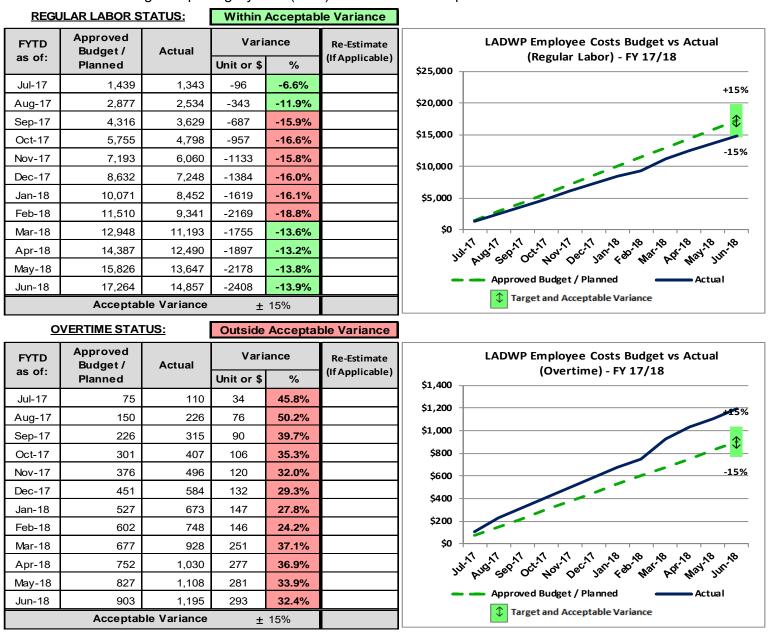
LADWP RATES METRIC – *LADWP EMPLOYEE COST BUDGET VS. ACTUAL* (Office of Sustainability)

RESPONSIBLE MANAGER: Nancy Sutley

REPORTING PERIOD: June 2018

DEFINITION OF RATES METRIC: LADWP Office of Sustainability employee costs (including regular labor, overtime, pension and healthcare, excluding daily exempt and Utility Pre-Craft Trainee) budget vs. actual (\$M) **TARGET & ACCEPTABLE VARIANCE (FY 17/18):** +/- 15%

SOURCE OF DATA: Budget Reporting System (BRS) - Rates Metrics Report



		YTD as of June 2018			
Employee Cost Category	Budget	Actual	Variance	Variance %	FY 17/18 Approved
Regular Labor	17,264	14,857	-2,408	-14%	17,264
Overtime	903	1,195	293	32%	903
Regular Labor + Overtime	18,167	16,052	-2,115	-12%	18,167
Health Care Allocation	5,068	4,943	-126	-2%	5,068
Retirement & Death Benefit	8,046	7,363	-683	-8%	8,046
Total	31,281	28,358	-2,924	-9.3%	31,281

1. BACKGROUND / PURPOSE

The Office of Sustainability has the following Minor Orgs: Org 11200 Efficiency Solutions is tasked with ensuring Los Angeles remains focused on meeting energy efficiency goals; and managing direct install programs, rebates, and incentives to promote savings for all LADWP customers. Orgs 11100, 11101, 11102, 11103, 11104, 11105, 11150 Environmental Affairs has oversight on compliance with environmental regulations and laws, guidance on the California Environmental Quality Act requirements and promoting sustainable operations for LADWP. Org 11000 is the Executive Office and is responsible for overall sustainability programs and policies for the Department.

3. <u>PERFORMANCE / VARIANCE ANALYSIS</u> <u>& YEAR END PROJECTION</u>

Regular Labor has been under expended by \$2.4M, or 14% of the labor budget, as of June 2018 as we continue to fill up Utility Services Specialist (USS) vacancies.

Overtime has been over expanded by \$2793k due to vacancies throughout the FY. Total OT is 8% of total labor expenditure, and was required to ensure customer expectations are met for program turn-around time. Total OT over expenditure is offset by the under expenditure in Regular Labor.

4. <u>MITIGATION PLAN AND / OR</u> <u>RECOMMENDATIONS</u>

Org 11 will continue to fill positions and office space in Figueroa Plaza had been identified for the new hires.

2. ACHIEVEMENTS / MILESTONES MET

The Office of Sustainability continues to work towards achieving the Department's 15% energy efficiency goal by 2020. Environmental Affairs also continues to ensure that LADWP remains in compliance with state environmental mandates and goals that incorporate a transparent and rigorous data performance analysis on GHG emissions and sustainable metrics into the day to day operations of LADWP.

LADWP RATES METRIC - LADWP EMPLOYEE COST BUDGET VS. ACTUAL

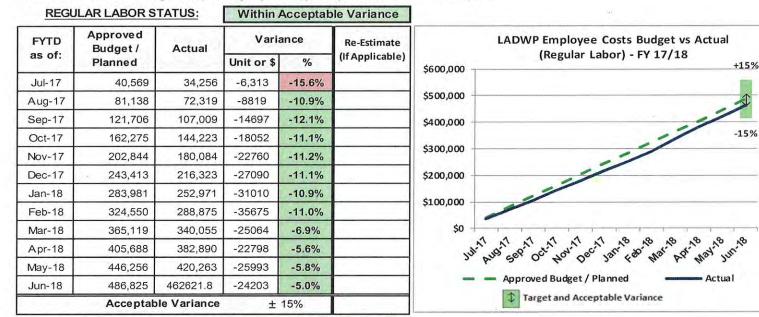
(Power)

RESPONSIBLE MANAGER: Reiko Kerr/Andrew Kendall/Ken Chang

REPORTING PERIOD: June 2018

DEFINITION OF RATES METRIC: LADWP Power System employee costs (including regular labor, overtime, pension and healthcare, excluding daily exempt and Utility Pre-Craft Trainee) budget vs. actual (\$M) **TARGET & ACCEPTABLE VARIANCE (FY 17/18):** +/- 15%

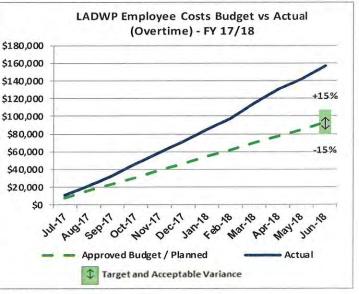
SOURCE OF DATA: Budget Reporting System (BRS) - Rates Metrics Report



OVERTIME STATUS:

Outside Acceptable Variance

FYTD	Approved Budget /	Actual	Varia	ince	Re-Estimate
as of:	Planned		Unit or \$	%	(If Applicable)
Jul-17	7,753	10,946	3,193	41.2%	
Aug-17	15,506	21,353	5848	37.7%	
Sep-17	23,258	32,713	9454	40.6%	
Oct-17	31,011	46,608	15597	50.3%	
Nov-17	38,764	58,393	19629	50.6%	
Dec-17	46,517	71,517	25000	53.7%	
Jan-18	54,269	85,152	30883	56.9%	
Feb-18	62,022	97,209	35187	56.7%	
Mar-18	69,775	115,026	45251	64.9%	
Apr-18	77,528	130,576	53048	68.4%	
May-18	85,280	142,005	56724	66.5%	
Jun-18	93,033	156392.9	63360	68.1%	
	Acceptab	le Variance	±	15%	



		i i			
Employee Cost Category	Budget	Actual	Variance	Variance %	FY 17/18 Approved
Regular Labor	486,825	462,622	-24,203	-5%	486,825
Overtime	93,033	156,393	63,360	68%	93,033
Regular Labor + Overtime	579,858	619,015	39,157	7%	579,858
Health Care Allocation	138,283	134,883	-3,400	-2%	138,283
Retirement & Death Benefit	223,361	200,738	-22,623	-10%	223,361
Total	941,502	954,636	13,134	1.4%	941,502



1. BACKGROUND / PURPOSE

Power System comprises eight major organizations with a total of 4,767 approved positions (4,557 APR and 210 Sub Funded):

Division	Apprvd
Power Executive (PEX)	61
Power Supply Operations (PSO)	906
Power External Energy Resources (PEER); formerly Power Fuel and Purchase	60
Power Transmission & Distribution (PTD)	1,559
Power Construction & Maintenance (PCM)	1,313
Power Planning, Development & Engineering (PPDED); merged Power Planning and Development Division and Power Engineering Division	794
Power Safety & Training (PST)	74
Total	4,767

Past Actuals	FY 14/15	FY 15/16	FY 16/17
Labor	\$423,932	\$424,608	\$432,703
OT	\$124,664	\$129,666	\$135,536

- LOA mandated overtime contributes to the overtime variance.
- New MOU implemented October 1, 2017, will result in additional double overtime for certain IBEW Local 18 represented units.

2. ACHIEVEMENTS / MILESTONES MET

- Through June 2018, Power System has 339 hirings in process.
- Power System is projected be within target or exceed its PSRP infrastructure replacements including poles, transformers, and crossarms.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- Power System has 1,070 total vacancies with 339 in the process of being filled.
- Many positions within PSO, PCM and PTD can only be permanently filled after new trainees successfully complete training programs that can last 18 months to four years including, Load Dispatcher, Electric Station Operator, Steam Plant Assistant, Electrical Mechanic, and Electric Distribution Mechanic.

- PSO's overtime variance of \$16.2M is primarily driven by the need to carry 24/7 coverage at various generating stations and the Energy Control Center; emergency repairs; work such as CIP-05 compliance that can only be done outside normal business hours and on weekends/holidays to minimize impact on the system; and staff coverage for vacant positions and for those on disability or time off.
- PCM's overtime variance of \$22.9M is primarily driven by support for Water treatment facilities, tanks, and pumping stations much of which is regulatory required: Meter Test assignments to complete Defective Meter Assignments within 90 days as required by class action settlement; support for design and construction of custom customer stations; emergency repairs at Castaic, Haynes, and Control Gorge facilities; and accelerated work schedule on the Beacon Energy Storage project.
- PTD's overtime variance of \$12.4M is primarily driven by PSRP related work including the replacement or installation of 51.4 circuit miles of cable replacement, 950 transformers, 10,879 cross-arms, and 3,018 poles, and 10,710 FIX-IT tickets.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

- Continuously fill vacancies throughout the Power System.
- Coordinate with LADWP's Employment Services and City Personnel to maintain active eligible lists for critical classes and feeder classes.
- Operating Divisions should work closely . with Power Safety and Training on size and frequency of future classes.
- Continue with plant and facility upgrades as well as progress on outstanding warranty items to increase reliability and reduce call outs.
- Overtime has been under-budgeted in the past. More realistic overtime funds budgeted for next fiscal year.

Within Acceptable Variance

Outside Acceptable Variance

Exceeds Target Needs Attention

LADWP RATES METRIC - LADWP EMPLOYEE COST BUDGET VS. ACTUAL

[Water]

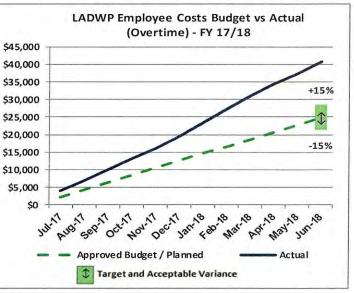
RESPONSIBLE MANAGER: Richard Harasick Summer Muth

DEFINITION OF RATES METRIC: LADWP Water System employee costs (including regular labor, overtime, pension and healthcare, excluding daily exempt and Utility Pre-Craft Trainee) budget vs. actual (\$M) **TARGET & ACCEPTABLE VARIANCE (FY 17/18):** +/- 15%

SOURCE OF DATA: Budget Reporting System (BRS) - Rates Metrics Report



Approved Variance FYTD **Re-Estimate** Budget / Actual as of: (If Applicable) Planned Unit or \$ % Jul-17 2,080 3,926 1,846 88.8% 4,160 6,747 2587 Aug-17 62.2% Sep-17 6,240 10,071 3832 61.4% 8,320 4892 Oct-17 13,211 58.8% Nov-17 10,399 15,967 5568 53.5% 12,479 19,489 7009 Dec-17 56.2% 14,559 23,167 8607 Jan-18 59.1% Feb-18 16,639 27,257 10618 63.8% Mar-18 18,719 31,098 12379 66.1% Apr-18 20,799 34,420 13621 65.5% May-18 22,879 37,304 14425 63.0% 40,885 15926 Jun-18 24,959 63.8% Acceptable Variance ± 15%



REPORTING PERIOD: June 2018

		YTD as of June 2018			
Employee Cost Category	Budget	Actual	Variance	Variance %	FY 17/18 Approved
Regular Labor	218,823	203,298	-15,525	-7%	218,823
Overtime	24,959	40,885	15,926	64%	24,959
Regular Labor + Overtime	243,781	244,182	401	0%	243,781
Health Care Allocation	64,199	65,697	1,498	2%	64,199
Retirement & Death Benefit	101,931	90,565	-11,366	-11%	101,931
Total	409,911	400,445	-9,467	-2.3%	409,911

1. BACKGROUND / PURPOSE

 The Water System is comprised of six divisions: Water Executive Office, Water Resources, Water Engineering and Technical Services, Water Distribution, Water Operations, and Water Quality. Staffing is a key resource necessary to accomplish major goals.

3. <u>PERFORMANCE / VARIANCE ANALYSIS</u> <u>& YEAR END PROJECTION</u>

- Overtime has been necessary for emergency operations, contracting out, achieving organizational goals, and efficiency of operations.
- Overall employee cost is within the acceptable variance.

2. ACHIEVEMENTS / MILESTONES MET

- The Water System has made great strides in its hiring plan and plans to continue aggressively hiring employees in the new fiscal year.
- The Water System has a total of 561 hires as of June 30, 2018, a net of 68 new employees. This is a 22% increase over a low in 2012.

4. <u>MITIGATION PLAN AND / OR</u> <u>RECOMMENDATIONS</u>

 Water System continues to monitor the effective use of overtime and executing the hiring plan.

Exceeds Target

ATTACHMENT III LADWP Equity Metrics Data Initiative

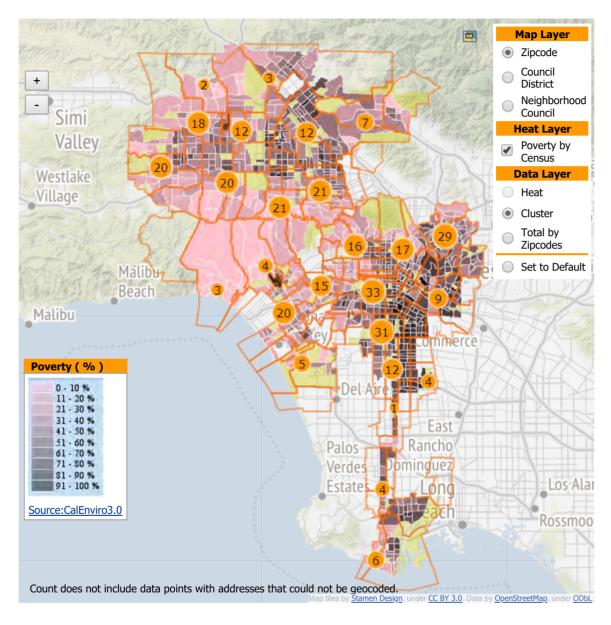
Equity Metrics Data Initiative

Equity Core Category	Equity Metric	Page #
	Water Quality Complaints	1-2
	Mainline Replacement	3-4
	SAIFI (System Average Interruption Frequency Index)	5, 7-8
Water & Power Infrastrucutre Investment	SAIDI (System Average Interruption Duration Index)	6-8
	PSRP - Poles Replaced	9-10
	PSRP - Transformers Replaced	11-12
	PSRP - Cable Replaced	13-14
	Rain Barrel Rebates	15-16
	Turf Removal Rebates	17-18
	Tree Canopy Program	19-20
	Commercial Direct Install Program	21-22
Customer Incentive	Home Energy Improvement Program	23-24
Programs/Services	Refrigerator Exchange Program	25-27
	Consumer Rebate Program	28-29
	Electric Vehicle Infrastructure	30-33
	Lifeline Discount Program	34-35
	Low Income Discount Program	36-37
Procurement	SBE (Small Business Enterprise)/DVBE (Disabled Veteran Business Enterprise) Program	38-39
Employment	New Hires/Promotions Demographic Composition	40-41

RESPONSIBLE MANAGER: Jonathan Leung

Water Quality Complaints

The numbers shown on the map are the water quality complaints based on color, taste and odor that helps assist with evaluating trends or identifying potential system issues.



LADWP EQUITY METRIC – Water Quality Customer Complaints

RESPONSIBLE MANAGER: Jonathan Leung REPORTING PERIOD: Jan - Oct 2018 EQUITY CORE CATEGORY: Responding to Customer Complaints Before the End of the Next Business Day

1. NARRATIVE / BACKGROUND

During the period January to October 2018, a total of 345 water quality complaints were received by the Water Quality Division including 190 complaints for taste and/or odor and 155 for discolored water. Reported complaints are depicted by 2-mile radius (map) and zip code (table).

2. <u>CRITERIA</u>

- Taste/Odor complaints
- Discolored water complaints
- Total complaints within a 2 mile radius

3. ACHIEVEMENTS

• Continue to consistently meet Mayor's Customer Bill of Rights goal of responding to water quality complaint calls by the end of the next business day.

4. ISSUES

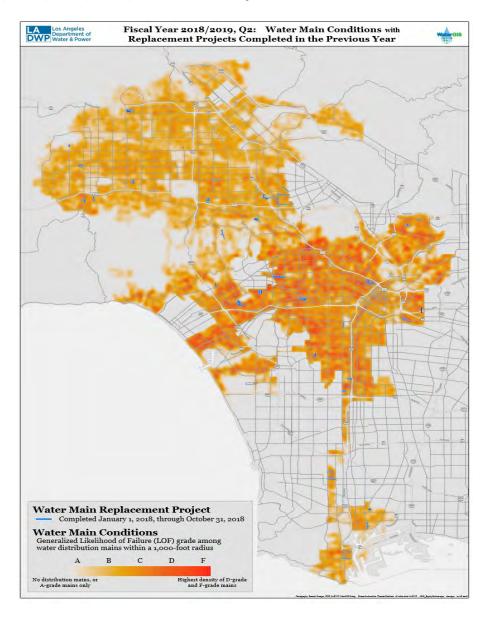
• None

- During the period Water Quality continued to share customer complaint data in with the Master in Public Policy Degree Program at UCLA Luskin to further assist in research correlating the frequency of complaint calls and to "age of property" of factors.
- Water Quality Division staff will remain engaged in working groups targeting premise plumbing issues, and how those influence customer confidence and satisfaction.
- Water Quality is working with NGOs and CBOs to promote drinking water by expanding the number of drinking fountains throughout the City, starting with LADWP Customer Service Centers, and to improve the perception of tap water.

RESPONSIBLE MANAGER: Alvin Bautista	REPORTING PERIOD: Jan 2018 - Oct 2018
Mainline Replacement	

Mainline replacement is a portion of the Water System's strategy to maintain reliability, to reduce leaks, and minimize interruptions and damage to the community. By mapping the geographic location of these replacements against the mainlines' likelihood of failure heat map provides a visual indicator of how well the Department is addressing the replacement of mainlines most at risk of failure.

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.



LADWP EQUITY METRIC – *Water System Probability of Failure & Planned Replacements (Water)*

RESPONSIBLE MANAGER: Alvin Bautista EQUITY CORE CATEGORY: Water Infrastructure Investment REPORTING PERIOD: Jan – Oct 2018

1. NARRATIVE / BACKGROUND

There are approximately 6,700 miles of water mains (pipes less than 24 inches in diameter) throughout the City. Water mains are the backbone of the City's water distribution system. The Water System has prioritized mainline that are in the highest risk of failure for replacement. Pipes that are targeted for replacement are typically corroded cast-iron pipes that are in poor condition and demonstrate frequent leaks and/or breaks.

2. CRITERIA

- Leak history (quantity, frequency)
- Soil condition
- Pipe age
- Risk of service interruption and community disruption

3. ACHIEVEMENTS

- Replaced over 1.6 million feet of mainline since Mainline Replacement Program inception (2006)
- Met and exceeded goal of 215,000 feet of mainline replacement in Fiscal Year 2017-18
- Maintained a leak rate that is below the national industry average
- Consistently maintained highest levels of water reliability to customers
- Updated Water Distribution Division Five-Year Action Plan
- Developed and commenced mainline replacement operations at Hollywood Laydown Yard

4. ISSUES

- Challenges with hiring skilled labor personnel to meet increasing mainline replacement footage
- Available construction laydown yard space to accommodate increasing personnel, materials, and equipment
- Increased regulatory permitting requirements

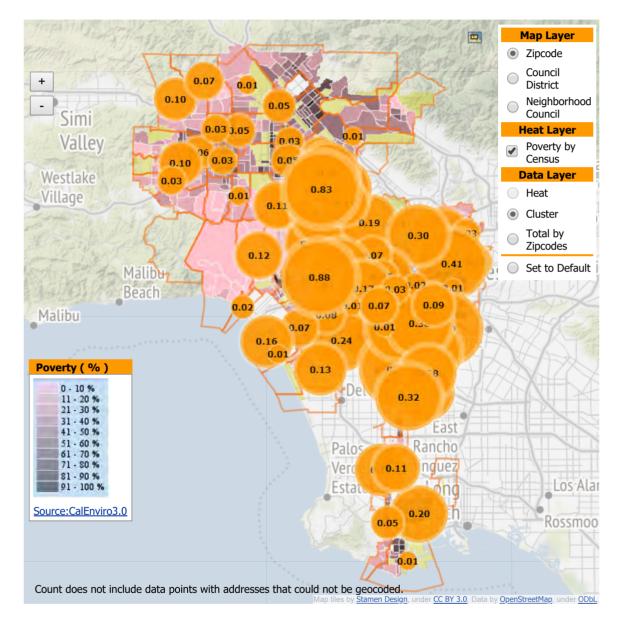
- Aggressively seek eligible candidates to hire and fill vacant and open positions
- Continue to develop LADWP-owned properties to strategically place construction crews close to planned mainline replacement projects
- Work and collaborate with other City departments to streamline permitting process/project execution
- Review and update Five-Year Action Plan to set and communicate achievable goals for mainline replacement footage (goal is to ultimately achieve a replacement cycle that is compatible with expected life of the asset)

RESPONSIBLE MANAGER:Herman Cheng	REPORTING PERIOD: Oct 2018
SAIFI	

The following reliability indices are used to measure the reliability performance of LADWP's distribution system in a 12-month rolling average: (Map below based on one month data)

• System Average Interruption Frequency Index (SAIFI): Average # of interruptions per year for the system

The numbers shown on the map are the average number of interruptions per year for the system by geographic area.

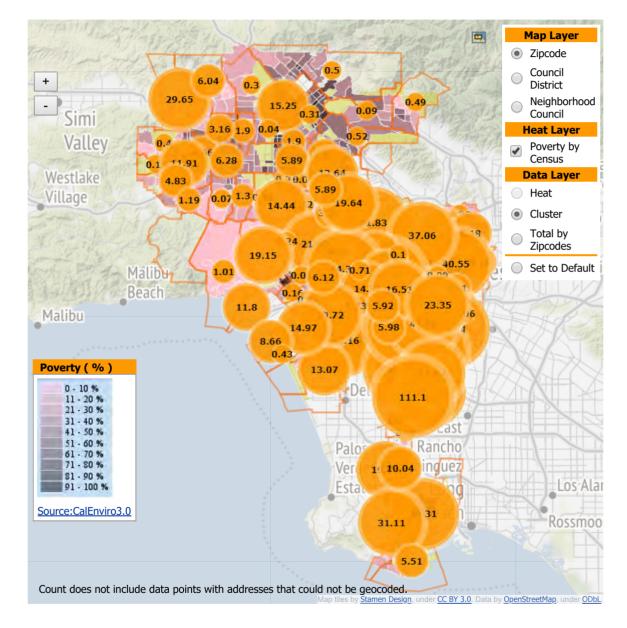


RESPONSIBLE MANAGER:Herman Cheng	REPORTING PERIOD: Oct 2018
SAIDI	

The following reliability indices are used to measure the reliability performance of LADWP's distribution system in a 12-month rolling average:

• System Average Interruption Duration Index (SAIDI): Average # of minutes a customer power is out in a year for the system

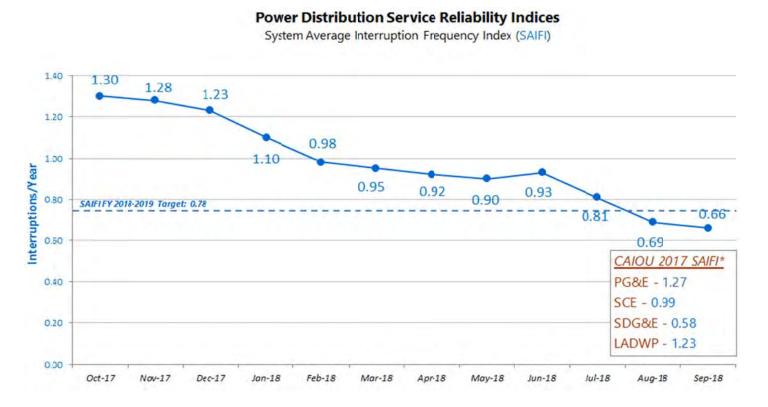
The numbers shown on the map are the average number of minutes a customer's power is out in a year for the system by geographic area.



LADWP EQUITY METRIC - SAIFI AND SAIDI (POWER)

RESPONSIBLE MANAGER: Herman Cheng **Construction EQUITY CORE CATEGORY:** Water and Power Infrastructure Investment

REPORTING PERIOD: Oct 2018 (Rolling Data Ending Sep 2018)



Power Distribution Service Reliability Indices

System Average Interruption Duration Index (SAIDI)



*CPUC is source of CAIOU data (<u>http://www.cpuc.ca.gov/General.aspx?id=4529</u>). The monthly SAIFI/SAIDI indices for the ZIP codes are listed in Attachment A.

1. NARRATIVE / BACKGROUND

SOURCE OF DATA: KPI No. 04.01.01.06 and 04.01.01.07

- SAIFI is the System Average Interruption Frequency Index, which is the number of interruptions experienced by the average customer. It is measured as the average number of sustained interruptions per year for each customer served during the 12-month period ending with the indicated month. Sustained interruptions are 5 minutes or more in duration.
- SAIDI is the System Average Interruption Duration Index, which is the interruption time (measured in minutes) that an average customer experiences. It is measured as the average duration of sustained interruptions per year for each customer served during the 12-month period ending with the indicated month. Sustained interruptions are 5 minutes or more in duration.
- SAIFI & SAIDI reliability indices are being analyzed to assess maintenance and equipment replacement efforts to optimize system performance. Unanticipated outages can cost significantly in equipment damage, reduced revenue, costly lawsuits, and poor customer perceptions.
- These two indices have to be combined together to accurately reflect the reliability performance of our distribution system.
- Several high profile outages in 2006 alerted LADWP's awareness in improving our reliability performance. LADWP requested Electric Power Research Institute (EPRI) to perform a distribution reliability study. The study outlined LADWP's reliability performance with detailed assessment of equipment maintenance, asset management, and project prioritization.
- As a result of this study, a Power Reliability Program (PRP) and Power System Reliability Program (PSRP) were enacted in 2007 and 2013, respectively, to assess LADWP's reliability performance through strategic replacement and maintenance of various assets. In addition to distribution assets, the PSRP also expanded the infrastructure replacement to include generation, transmission, and substation assets.

2. CRITERIA

- Quantitative analysis of outage statistics to identify equipment failures which contribute to outage frequency and duration.
- Assessment of equipment failure trends to prioritize equipment replacement efforts and maintenance activities.

3. ACHIEVEMENTS

 Based on a System Reliability, Restoration, and Response Report (SR3) conducted by PA Consulting Group, LADWP's SAIFI (excluding Major Event Days) was ranked in the 1st decile at 0.68 in calendar year 2016 compared to other investor-owned utilities.

4. ISSUES

- The reliability indices for September 2018 are SAIFI at 0.66 and SAIDI at 129.48 minutes.
- SAIDI is higher than normal due to severe weather events causing outages for prolonged durations. There were heavy rainstorms and wind gusts in December 2017 and March 2018, and there were heat storms in July 2018.
- Approximately 114,000 customers were affected during the July 6-10, 2018 heat wave. Average daily high temperatures reached 117°F in the San Fernando Valley, and peak load reached 6,256 MW on July 6, 2018, the highest ever for a July day.
- Circuit Breaker (CB) failures, due to aging equipment and maintenance efforts continue to be a problem since 2014.
- Balloon-related outages are on a steady rise since 2014, with nearly 500 outages in 2017. Assembly Bill (AB) 2450 was introduced on February 14, 2018 and is currently at the Senate. AB-2450 will require manufacturers of metallic balloons to put a warning label that warns the consumer about the dangerous risk of fire if the balloon comes in contact with an electrical power line.

5. <u>RECOMMENDATIONS</u>

- Accelerate CB replacement as CB failures affect a large number of customers and have a cascading effect that could cause widespread collateral damage to other station equipment.
- Accelerate cross arms and underground cable replacement.
- Repair temporary fixes in a timely manner.

6. MANAGEMENT COMMENTS ON STATUS

 Replacement of aging assets will reduce the risks of outages due to their vulnerability during adverse weather conditions.

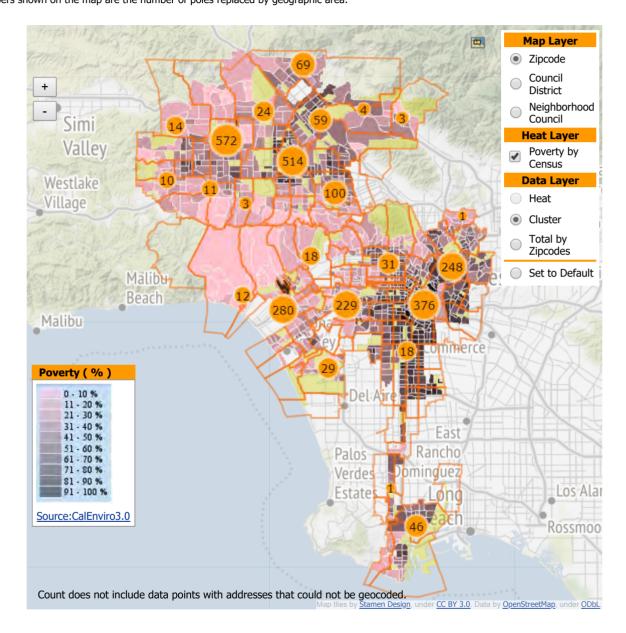
- The reliability indices can be accessed by the public via link http://prp.ladwp.com.
- DWP has reached out to customers, such as Westwood Neighborhood Council, Silver Lake Neighborhood Council, Venice Neighborhood Council, Crestview Neighborhood Association, and Larchmont-Windsor Square on reliability performance issues and improvement plans. DWP has also conducted workshops for Key Accounts customers to educate them about our power reliability programs.

REPORTING PERIOD: Jan 2018 - Oct 2018

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RESPONSIBLE MANAGER:Bill Herriott
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PSRP – Pole Replaced
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The Department's PSRP pole replacement work is done in compliance with California Public Utilities Commission (CPUC) General Order 165 – Inspection Cycles for Electric Distribution Facilities. Poles are identified for replacement through the Power System's aggressive Inspection Program. The overhead power system has approximately 321,000 poles. By mapping the geographic location of these replacements against the Cal-Enviro 3.0 Poverty Indicator we can see both the geographic and demographic distribution of the Department's pole replacement work. The numbers shown on the map are the number of poles replaced by geographic area.



LADWP BATES/EQUITY METRIC - Pole Replacement (Power)

RESPONSIBLE MANAGER: Mike Barkhuff, Power Transmission and Distribution

EQUITY CORE CATEGORY: Water and Power Infrastructure Investment

REPORTING PERIOD: October 2018

DEFINITION OF RATES METRIC: Number of Poles Replaced Against Plan **TARGET & ACCEPTABLE VARIANCE (FY 18/19):** Target = 3,500; Acceptable Variance = ± 15%

STATUS: Within Acceptable Variance

FYTD	Planned	Actual	Vari	iance	Re-Estimate	Pole Replacement
as of:	(No.)	(No.)	No.	%	1	FY 18/19 4500 +15
Jul-18	292	529	237	81.2%		4000
Aug-18	584	803	219	37.5%	1	3500
Sep-18	876	1,009	133	15.2%		y 3000
Oct-18	1,168	1,309	141	12.1%		<u>3000</u> <u>A</u> 2500 -15
Nov-18	1,460				1,460	5 2000
Dec-18	1,752				1,752	2° 1500
Jan-19	2,044	1			2,044	1000
Feb-19	2,336				2,336	500
Mar-19	2,628				2,628	
Apr-19	2,920				2,920	JAN BAR BED OCH NON DEC JEN BED WEL AD WEN JAN
May-19	3,212				3,212	
Jun-19	3,500				3,500	Planned Actual
	Accepta	able Variance	A MAR DANK	± 15%	0.0%	Target and Acceptable Variance

SOURCE OF DATA: Jobs P6322 (KPI # 04.01.01.03)

1. BACKGROUND / PURPOSE

Replace 3,500 deteriorated poles due to age or other damage. Power Transmission and Distribution (PTD) maintains approximately 321,000 poles in its system. These poles have an average life span of fifty years. These poles support switches, light fixtures, transformers, and underground cables transitioning to an overhead termination, communication cables, crossarms and conductors at different voltage levels. Work is completed by Distribution Construction & Maintenance (DC&M) district and contract crews. This work is required to maintain compliance with California Public Utilities Commission (CPUC) General Order 165- Inspection Cycles for Electric Distribution Facilities, and our Power System Reliability Program (PSRP).

2. CRITERIA

 Poles for replacement were identified through the DC&M Inspection program.

3. ACHIEVEMENTS / MILESTONES MET

• To date, the target was to replace 1,168 poles and the current actual number of poles replaced was 1,309.

4. <u>PERFORMANCE / VARIANCE ANALYSIS</u> & YEAR END PROJECTION

• The actual number of poles replaced is within the 15% threshold target.

5. <u>MITIGATION PLAN AND / OR</u> <u>RECOMMENDATIONS</u>

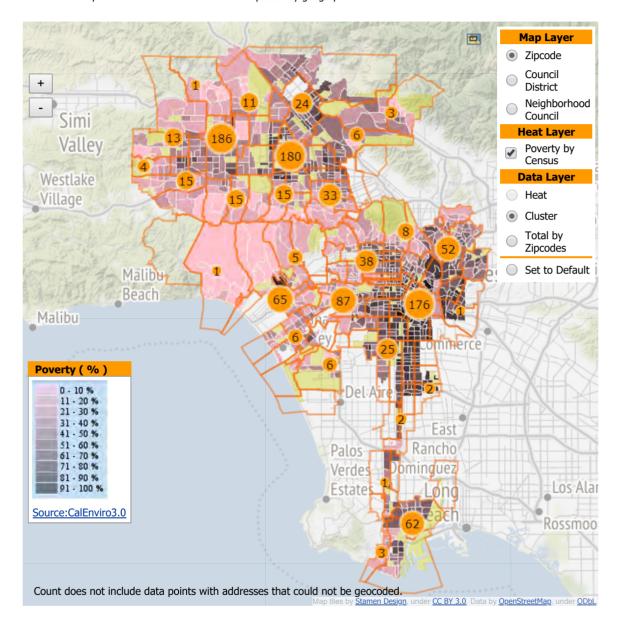
No mitigation plan is necessary at this time.

- PTD utilizes poster boards at job locations indicating why work was being performed.
- PTD conducts presentations at Community Council meetings describing PSRP work.
- PTD crew leaders notify customers in person when planning access to facilities for pole replacements.

RESPONSIBLE MANAGER:Bill Herriott

PSRP – Transformers Replaced

The Department's PSRP transformer replacement work addresses reliability improvements by monitoring, reviewing, and inspecting over 126,000 transformers in service, and then replacing those that fail and are at highest risk of in-service failures. By mapping the geographic location of these replacements against the Cal-Enviro 3.0 Poverty Indicator we can see both the geographic and demographic distribution of the Department's transformer replacement work. The numbers shown on the map are the number of transformers replaced by geographic area



LADWP RATES/EQUITY METRIC - Transformer Replacement (Power)

RESPONSIBLE MANAGER: Mike Barkhuff, Power Transmission and Distribution EQUITY CORE CATEGORY: Water and Power Infrastructure Investment

REPORTING PERIOD: October 2018

DEFINITION OF RATES METRIC: Number of Transformers Replaced Against Plan **TARGET & ACCEPTABLE VARIANCE (FY 18/19):** Target = 800; Acceptable Variance = ± 15%

Exceeds Target STATUS: Variance **Transformer Replacement** FYTD Planned Actual **Re-Estimate** FY 18/19 as of: (No.) (No.) No. % 15% 1000 Jul-18 100 126 26 26.0% 900 800 Aug-18 180 363 183 101.7% No. of Transformers 700 Sep-18 250 518 268 107.2% 600 Oct-18 350 602 252 72.0% 500 Nov-18 400 500 400 Dec-18 450 550 300 525 600 Jan-19 200 600 625 100 Feb-19 0 Mar-19 650 650 Septe octine 404.18 Decins 1211.19 +00.10 Jul-18 18 Jun AUG Apr-19 700 700 May-19 750 750 Planned... Actual... Jun-19 800 800 T Target and Acceptable Variance Acceptable Variance ± 15% 0.0%

SOURCE OF DATA: Jobs P6394/P6309 (KPI # 04.01.01.02)

1. BACKGROUND / PURPOSE

 Replace 800 distribution transformers to increase reliability and maintain compliance with California Public Utilities Commission (CPUC) General Order 165- Inspection Cycles for Electric Distribution Facilities. Power Transmission and Distribution (PTD) maintains more than 126,000 distribution transformers. This work is required to provide customers reliable power and a better customer experience. Work is completed by Distribution Construction & Maintenance (DC&M) district or contract crews and is related to Power System Reliability Program (PSRP).

2. CRITERIA

 Transformer replacements are identified through DC&M inspection programs or due to transformer failures or are at risk of failing.

3. ACHIEVEMENTS / MILESTONES MET

 To date, the target was to replace 350 transformers and the current actual number of transformers replaced is 602.

4. <u>PERFORMANCE / VARIANCE ANALYSIS</u> <u>& YEAR END PROJECTION</u>

The actual number of transformers replaced exceeds the 15% threshold set for the monthly target.

5. <u>MITIGATION PLAN AND / OR</u> <u>RECOMMENDATIONS</u>

• The variance overrun is due to the districts concentration on the lists of overloaded transformers received from engineering, as well as the transformers replaced due to the July 2018 heat storm. The number of transformer replacements will continue to decline.

6. OUTREACH STRATEGY / PLAN

- PTD utilizes poster boards at job locations indicating why work is being performed.
- PTD conducts presentations at Community Council meetings describing PSRP work.
- PTD crew leaders notify customers in person when planning access to facilities for transformer replacements.

Needs Attention

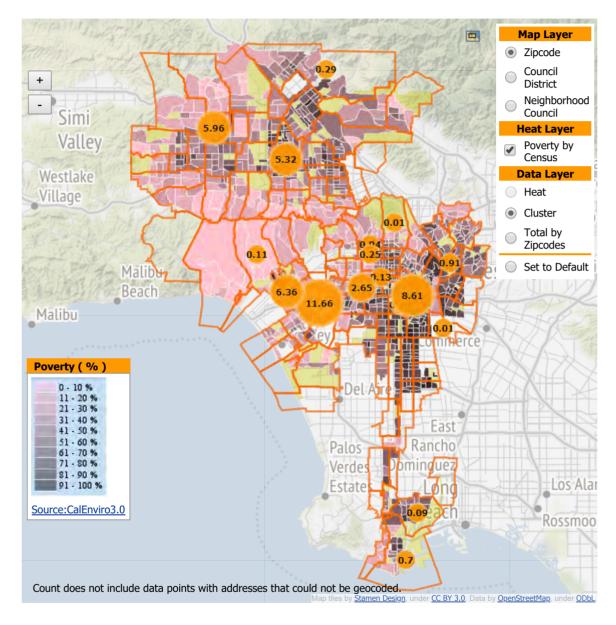
12

RESPONSIBLE MANAGER:Wayne Hinkson

PSRP – Cable Replaced

The Department's PSRP cable replacement work addresses reliability improvements replacing cable that is at high risk of failure due to deterioration, overload, obsolescence and damage. By mapping the geographic location of these replacements against the Cal-Enviro 3.0 Poverty Indicator we can see both the geographic and demographic distribution of the Department's cable replacement work.

The numbers shown on the map are the number of circuit miles of cable replaced by geographic area.



LADWP RATES/EQUITY METRIC - Cable Replacement (Power)

RESPONSIBLE MANAGER: Sager Farraj

REPORTING PERIOD: October 2018

for

SIF

Power Planning, Development, and Engineering Division EQUITY CORE CATEGORY: Water & Power Infrastructure Investment

DEFINITION OF RATES METRIC: No. of Miles of Cable Replaced Against Plan TARGET & ACCEPTABLE VARIANCE (FY 18/19): Target = 50 miles; Acceptable Variance = ±15%

STATUS: Outside Acceptable Variance

FYTD	Planned	Actual	Varia	Re-Estimate	
as of:	(Mile)	(Mile)	Mile	%	
Jul-18	4.2	3.2	-1.0	-23.8%	
Aug-18	8.4	6.4	-2.0	-23.8%	
Sep-18	12.6	8.9	-3.7	-29.4%	
Oct-18	16.8	13.1	-3.7	-22.0%	
Nov-18	21.0				21.0
Dec-18	25.0				25.0
Jan-19	29.2				29.2
Feb-19	33.4				33.4
Mar-19	37.6			(1-1)	37.6
Apr-19	41.8				41.8
May-19	46.0		1		46.0
Jun-19	50.0				50.0
	50.0	le Variance	± ·	15%	

SOURCE OF DATA: FI 21190, Job P6306 (KPI # 04.01.01.70)

1. NARRATIVE / BACKGROUND

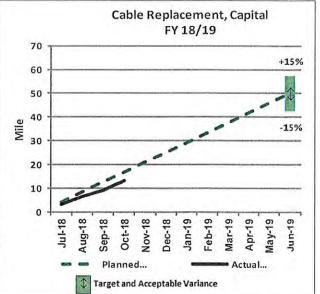
- Cable replacement of 4.8-kV and 34.5-kV cables for additional system reliability due to deterioration, overload, obsolescence and damage.
- 2. CRITERIA
 - Frequency of failures
 - Cable age
 - Physical deteriorations: cracks, bulging

3. ACHIEVEMENTS

 Through the month of October, Distribution Construction & Maintenance completed 13.1 circuit-miles. The key performance goal is 50 circuit-miles for fiscal year 18/19.

4. <u>PERFORMANCE/VARIANCE ANALYSIS & YEAR</u> END PROJECTION

• Variance through the month of October is 3.7 circuit-miles, 22% below target. This is due to Districts being behind with paper work. Cable replacement jobs haven't been closed even though the work is done. Districts crews have been focusing on cable replacement backlog.



Variance is 7,713.3K above budget; KPI number is expected to be higher once Districts close these jobs.

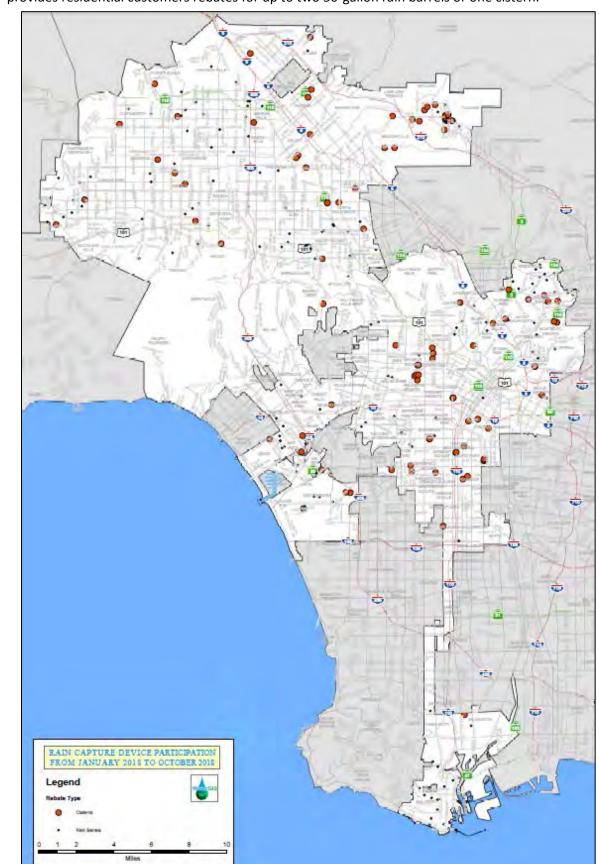
5. MITIGATION/RECOMMENDATION

Working with Districts to have the completed cable replacement jobs close.

- Neighborhood Council request for meeting on outages
- Available information on web site: <u>http://prp.ladwp.com</u>

RESPONSIBLE MANAGER: Penny Falcon

RAIN BARREL REBATES



LADWP provides residential customers rebates for up to two 50-gallon rain barrels or one cistern.

LADWP EQUITY METRIC - Rain Barrel Cistern Rebates (Water System)

RESPONSIBLE MANAGER: Penny Falcon EQUITY CORE CATEGORY: **REPORTING PERIOD: January – October 2018**

1. NARRATIVE / BACKGROUND

As part of its 2015 Urban Water Management Plan, LADWP adopted ambitious long-term goals of increasing local water supplies to fiftypercent (50%) of our supply portfolio by 2035. LADWP offers rain barrel and cistern rebates to customers to help reach this goal through increased stormwater capture and rainwater harvesting.

2. CRITERIA

Rain Barrel and Cistern Rebate criteria:

- Customers receive a rebate for up to \$50/rain barrel (min 50 gals), limit 2
- Customers receive a rebate for up to \$500 per cistern (min 200 gals), limit 1

3. ACHIEVEMENTS

- Total Rebates
 - Rebated 242 rain barrels
 - o Rebated 104 cisterns

4. ISSUES

None

5. OUTREACH STRATEGY / PLAN

- LADWP encourages customers to purchase and install rain barrels and cisterns through offering rebates. We promote our rebate programs through community events, social media, etc. Customers can access a <u>video</u> on proper rain barrel installation on the Department's YouTube Sustainable Landscaping playlist.
- LADWP also partners with non-profit organizations and external organizations to promote sustainable landscaping practices, such as stormwater capture at Hands on Workshops, California Friendly Landscape Training classes, and Turf Removal classes.
- LADWP created a stormwater capture photo gallery on our California Friendly Landscaping website to assist customers in complying with sustainable landscaping rebate requirements.

http://www.ladwp.cafriendlylandscaping.com /GWImage.php?index=5&source=gg

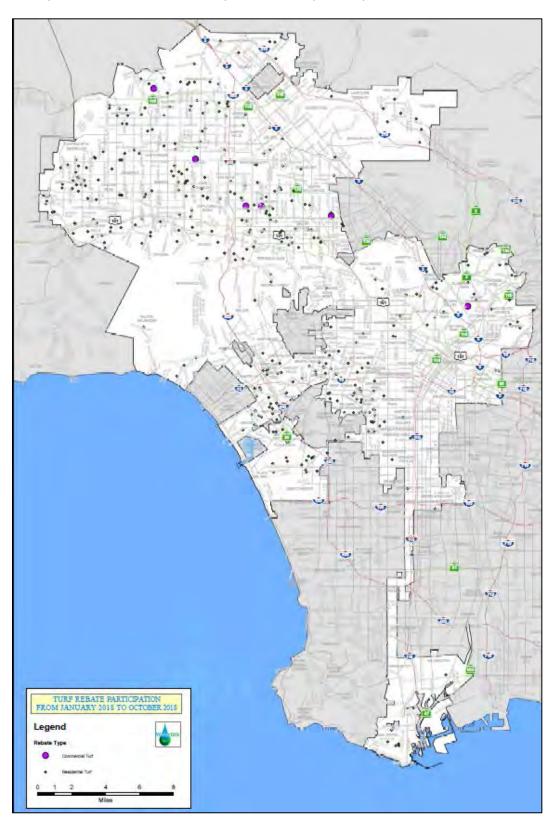
• Through our One Water LA partnership, the Los Angeles Bureau of Sanitation (LASAN) promotes our rain barrel and cistern rebate program at their community events, social media, etc.

LADWP EMDI – Customer Incentive Programs /Services

RESPONSIBLE MANAGER: Penny Falcon

Turf Removal Rebates

LADWP provides turf removal rebates to residential and commercial customers that replace turf with California Friendly and native plants. In addition to adding mulch, increasing permeability and grading to capture rain water, customers are encouraged to create sustainable landscapes that maximize the benefits of the air, water and soil relationship. The program is a great way for customers to save money and, more importantly, save water.



LADWP EQUITY METRIC - Turf Removal Rebates (Water System)

RESPONSIBLE MANAGER: Penny Falcon EQUITY CORE CATEGORY: **REPORTING PERIOD: January – October 2018**

1. NARRATIVE / BACKGROUND

As part of its 2015 Urban Water Management Plan, LADWP adopted ambitious long-term goals of reducing per capita use by 22.5 percent by 2025 and 25 percent by 2035. To help meet these goals, LADWP offers a generous turf removal rebate to encourage customers to switch to sustainable landscaping by installing California friendly plants and capturing rainwater. In July 2018, Metropolitan Water District (MWD) allocated funding to resume contributions toward LADWP's turf removal rebate available to customers.

2. CRITERIA

- Residential Turf Removal Rebate: \$2.00 per square foot (up to a maximum of 1,500 square feet)
- Commercial Turf Removal Rebate
 Prior to 07/01/2018
 - \$1.00 per square foot for 250 to 10,000 square feet removed
 - \$0.50 per square foot for 10,001 to 43,560 square feet removed

After 07/01/2018

• \$2.00 per square foot for 250 to 10,000 square feet removed

3. ACHIEVEMENTS

- Residential Turf Removed
 483,952 square feet of turf
- Commercial Turf Removed
 - o 31,551 square feet of turf

4. ISSUES

None

5. OUTREACH STRATEGY / PLAN

- Save the Drop Water Conservation Outreach Campaign which includes messaging to promote sustainable landscaping through public announcements, radio spots, event handouts, signage on city trucks, buses and etc.
- LADWP sponsors community partnership grants for non-profit organizations to promote outdoor water conservation through pilot Hands on Workshops, pilot Green Gardeners maintenance classes and videos promoting sustainable landscaping practices.
- LADWP offers planting templates, individual plant profiles and virtual tours of sustainable landscaping to help customers comply with the sustainable landscape rebate guidelines. The newly added Lawn-to-Garden Transformation Section provides customers with design suggestions and installation instructions.

http://www.ladwp.cafriendlylandscaping.com /lawn-to-garden/

 LADWP adopted the program name "Landscape Transformation Program" in continuity with MWD's naming convention and public outreach campaign which started on July 1st.

LADWP EMDI - Customer Incentive Programs/Services

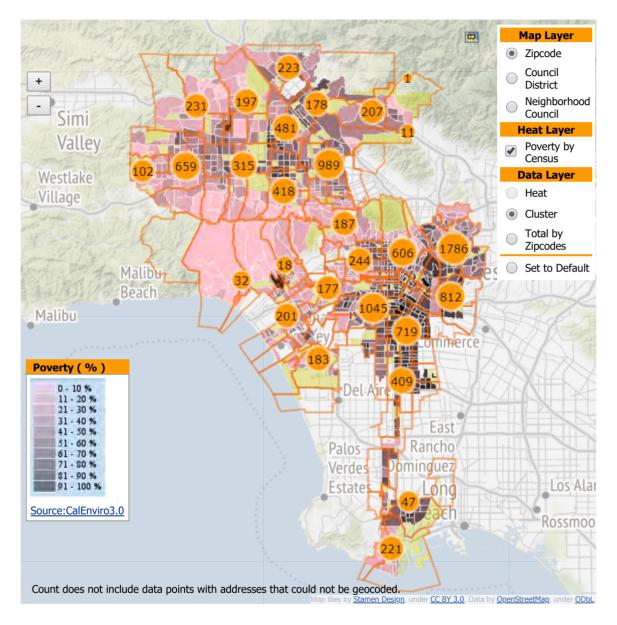
REPORTING PERIOD: Jan 2018 - Sep 2018

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RESPONSIBLE MANAGER:Craig Tranby
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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%.

The numbers shown on the map are the number of trees planted by geographic area.



LADWP EQUITY METRIC - Tree Program - City Plants (Joint)

RESPONSIBLE MANAGER: Craig Tranby EQUITY CORE CATEGORY: Customer Incentive Program/Services **REPORTING PERIOD: 5/18 – 10/18**

1. NARRATIVE / BACKGROUND

This program is critical to achieving the cumulative 15 percent energy savings target for LADWP adopted by the Board, as it allows LADWP to partner with City Plants to prioritize and accelerate implementation of energy savings opportunities through tree planting. City Plants focuses on low-canopy communities, promoting healthy living and creating jobs. In addition, the LADWP partnership has focused on potential energy savings resulting from trees shading buildings.

2. <u>CRITERIA</u>

- City of Los Angeles residents and businesses are eligible for free trees
- Trees are selected and located to maximize energy savings and minimize water use
- Includes both street trees and yard trees
- Low canopy areas targeted
- Coordinates with LADWP Community Affairs and Council Offices to schedule distribution events in areas of need

3. ACHIEVEMENTS

- Successfully nearing completion of 2017-18 MOU; expect new MOU for 2019-20+.
- At least 40,600 trees will have been planted/distributed under 2017-18 MOU
- Program continues to leverage CalFire grants to fund watering, pavement cuts, and additional plantings.
- Energy savings of about 6 GWh annually
- Many successful tree planting events involving communities throughout the City

4. ISSUES

- Independent study identified City in dire need of an Urban Forestry Management Plan and better funded and coordinated efforts regarding its urban forest.
- Drought has caused tremendous die-off and stress for the City's urban forest
- Looking for ways to increase/improve follow-up with customers.

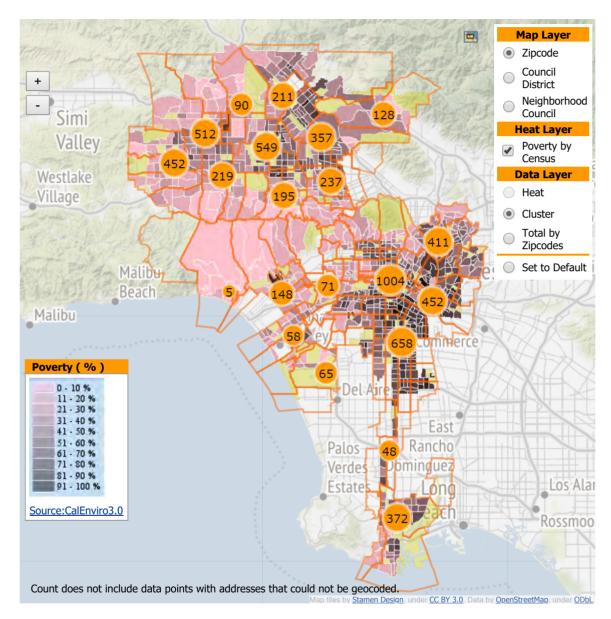
- Developed new co-branded collateral and event materials with LADWP
- Coordination with LADWP efficiency programs and outreach grantees
- Coordination with partners and elected offices
- Events
- Website/Social Media
- Advertising
- Canvassing

LADWP EMDI - Customer Incentive Programs/Services

RESPONSIBLE MANAGER:Steven Starks

Commercial Direct Install

LADWP's Commercial Direct Install Program is available to qualifying businesses whose average monthly electrical demand is 200 kilowatts (kW) or less. After an energy and water use assessment is made, energy and water saving equipment is installed at the business at no cost to the business owner. The numbers shown on the map are the number of commercial customers participating in the program by geographic area.



LADWP EQUITY METRIC – Commercial Direct Install (Joint)

RESPONSIBLE MANAGER: Victoria Black EQUITY CORE CATEGORY: Customer Incentive Programs EQ KPI ID 14

REPORTING PERIOD: FY17/18 through 103118

1. NARRATIVE / BACKGROUND

This program is a direct install program that offers business customers in the LADWP territory free lighting and water retrofit products and services to improve the energy and water efficiency. LADWP partners with Southern California Gas Company (SCG) to offer a tri-resource efficiency program aiming to reduce the use of electricity, water and natural gas.

2. <u>CRITERIA</u>

- Target market is commercial customers
- LADWP electric account holder in good account status
- Monthly usage 250* kW or lower
 *effective January 2018 the monthly usage increased from 200 kW to 250 kW.

3. ACHIEVEMENTS

FY 17/18:

- Savings 88,984,064 kWh
- Savings 15,993 kW
- Savings 8,900 HCF
- 6,763 businesses completed
- FY 18/19 (through 10-31-18)
- Savings 36,362,845 kWh
- Savings 6,338 kW
- Savings 3,423 HCF
- 3,186 businesses completed

4. ISSUES

- Expectations of business customers (wanting what the program does not offer)
- Projects exceeding the cost versus expected savings baseline

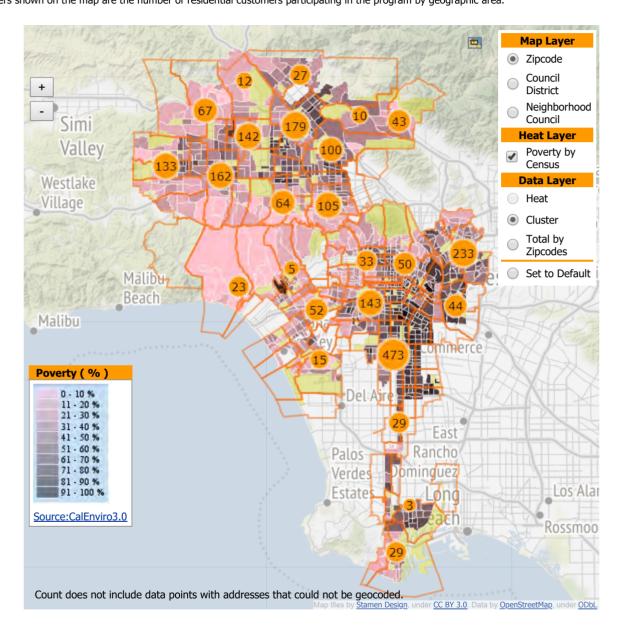
- Outbound Canvassing Existing Community Based Organizations (CBO) and other community organizations market the program and its availability to LADWP business customers
- Flyers Program flyers are distributed via outbound canvassing, community events support, and any other appropriate outreach channel likely to build program awareness
- Website Program information in English and Spanish is available on the LADWP website
- New lighting product technology is frequently introduced and evaluated for review and approval for inclusion to the existing approved measures

LADWP EMDI - Customer Incentive Programs/Services

RESPONSIBLE MANAGER:Steven Starks

Home Energy Improvement

The Home Energy Improvement Program (HEIP) offers LADWP residential customers the opportunity to improve the energy and water performance in their homes, which can improve their comfort level and potentially reduce their energy and water cost. The numbers shown on the map are the number of residential customers participating in the program by geographic area.



LADWP EQUITY METRIC - Home Energy Improvement (Joint)

RESPONSIBLE MANAGER: Victoria Black EQUITY CORE CATEGORY: Customer Incentive Programs EQ KPI ID 8 REPORTING PERIOD: FY 17/18 through 103118

1. NARRATIVE / BACKGROUND

This program is a comprehensive direct install whole-house retrofit program that offers residential customers a full suite of free products and services to improve the energy and water efficiency in the home by upgrading/retrofitting the home's envelope and core systems. While not limited to low-income customers, HEIP's priority is to serve LADWP's neediest customers.

4. ISSUES

- Trust (A portion of customers do not believe the program is free)
- Landlord refusal to allow participation
- Condition of the home (Asbestos, Mold, etc.)
- Presence of hazardous material
- Staff shortage causes delay in completing intake process and forwarding eligible customers to HEIP Field Team for scheduling assessments and installation

5. OUTREACH STRATEGY / PLAN

- Direct Mail Mail batches are created according to council district and zip code and delivered to our vendor for mailing
- Flyers Program flyers are distributed via direct mail, utilized for community events support, distributed to council districts for reach constituent centers, and any other appropriate outreach channel likely to build program awareness
- Website Program information in English and Spanish, including the HEIP application is available on the LADWP website
- Hotline A toll-free program hotline and email address is available for customers to have access with HEIP personnel
- Program Outreach & Community Partnership Program – Some of the grantees that participate in the POCP program provide services to hard-to-reach customers that help them participate in the HEIP program

2. CRITERIA

- Target market is residential customers
- LADWP electric account holders

3. ACHIEVEMENTS

FY 17/18:

- Savings 5,886,971 kWh
- Savings 38,811 HCF
- 2,545 homes completed
- FY 18/19 (through 10-31-18):
- Savings 1,913,861 kWh
- Savings 13,781 HCF
- 1,021 homes completed

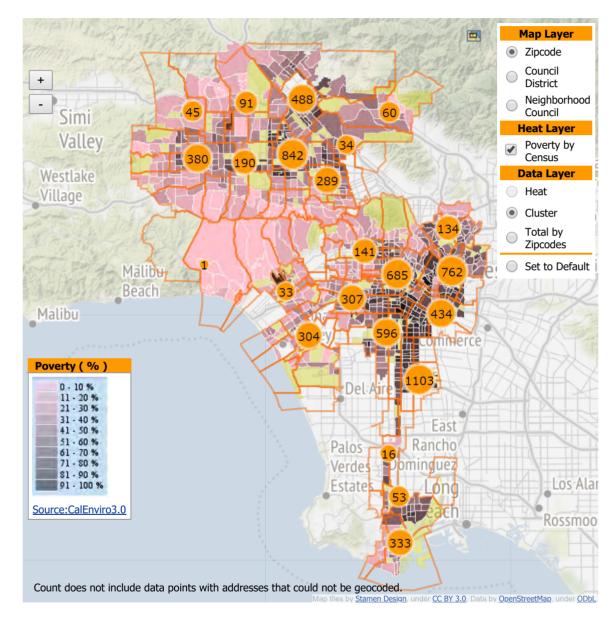
LADWP EMDI - Customer Incentive Programs/Services

RESPONSIBLE MANAGER:Steven Starks

Refrigerator Exchange Program

The LADWP's Refrigerator Exchange Program provides new energy-saving, ENERGY STAR® rated refrigerators in exchange for qualified older model refrigerators, free of charge.

The numbers shown on the map are the number of refrigerators provided by geographic area.



LADWP EQUITY METRIC - Refrigerator Exchange Program (Joint)

RESPONSIBLE MANAGER: Victoria Black EQUITY CORE CATEGORY: Customer Incentive Programs/Services

1. NARRATIVE / BACKGROUND

Refrigerator Exchange Program (REP) is a free refrigerator replacement program designed to target customers that qualify on either LADWP's Low-Income or its Senior Citizen/Disability Lifeline Rates. The program was expanded to include the following entities, multi-family and mobile home communities, civic, community, faith-based organizations as well as educational institutions. This program leverages a 3rd Party Contractor, ARCA (Appliance Recycling Centers of America), to administer the delivery of the program and provides energy efficient refrigerators for these customer segments to replace older, inefficient, but operational models.

2. CRITERIA

- a) Targeted Sectors:
 - Residential
 - Multi-family
 - Nonprofit
- b) Program Qualifications:
 - Must be a LADWP customer in good standing
 - Be a LADWP residential customer on the Low Income or Lifeline Discount rate or
 - Be a qualifying multi-family unit in which the property owner owns the refrigerator unit or a mobile home community

 Multi-Family Property must be owned or rented in accordance with policies for Affordable Housing in use by the Los Angeles Housing Department, or

• A minimum of 50% of residents must be income qualified or

- Be a qualified:
 - o Civic Organization
 - Community Organization
 - Faith-Based Organization
 - Educational Organization

c) Unit Criteria:

- In order to qualify the unit must meet the following criteria:
 - Located in the LADWP service territory
 - o Owned by qualified recipient
 - o Be at least 10 years old
 - A minimum of 14 cubic feet
 - o In working condition
 - o Used as the primary unit
 - Be plugged into a properly grounded outlet

d) Market Penetration:

 As of October 31, 2018, there was a potential participation pool of approximately 147,000 customers; who are receiving services on either a low income or lifeline rate schedule, who have not already participated in this program, and may have qualifying units.

3. ACHIEVEMENTS

- The program reached the milestone of being in existence for 11 years
- Since program inception, May 1, 2007, to, October 31, 2018, a total of 126,124 refrigerators were exchanged for a savings of 100,159,532 kWh.
- Initiated and completed a "cold call marketing" campaign. The campaign targeted approximately 4,500 customers who initially requested to participate in the exchange but did not complete the process. The customers were reminded about the program offering and advised that they were still eligible to participate. Out of the 4,500 calls, 446 customers elected to participate in the program.
- Participated in discussion with representative from Restore Neighborhoods LA, Inc. regarding \$30 million grant that was awarded to the Watts Rising Collaborative. The discussion focused on how the Refrigerator Exchange Program can be

REPORTING PERIOD: FY 17-18 (through 10/31/18)

leveraged to provide refrigerators to qualified customers.

4. ISSUES

- Lack of individual customer awareness of program
- Lack of multi-family property awareness of the program
- Trust, customer's skepticism of free offering
- Increased difficulty in achieving energy savings targets as the program matures, as the majority of the older refrigerators have been exchanged. The average age of refrigerators being exchanged continues to decrease, which lowers the savings realized from program participation (refrigerators manufactured 1993 and earlier consume significantly more energy than those manufactured after 1993)
- Program Inconveniences:
 - Customer must coordinate and be present for two separate site visits, pre-inspection and delivery
 - Refrigerator provided doesn't come with additional features i.e. ice maker, in door water dispenser, etc.

o No color options

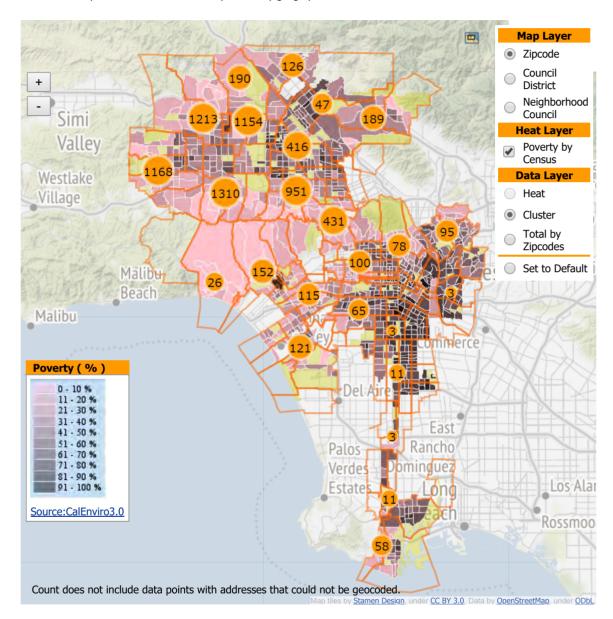
5. OUTREACH STRATEGY / PLAN

- Continued Marketing Campaigns via,
 - Cold calling previous program applicants that ultimately cancelled their participation prior to receiving a new unit.
 - o Direct Mailing
 - o Customer Service Events
 - o Bill On-serts
 - o E-mail Blast
 - o CBOs
 - o Neighborhood Council Newsletters
 - o Community Events
 - Social Media Networks (Facebook, Twitter, etc.)
 - o Additional Marketing, as appropriate
- Use of program to educate customers on energy efficiency and of the added expense an environmental impacts of both inefficient and possessing additional refrigerators and/or freezers

RESPONSIBLE MANAGER:Steven Starks

Consumer Rebate Program

LADWP offers the Consumer Rebate Program (CRP) to our residential customers to promote the use of energy-efficient products. This program is designed to both educate and encourage LADWP residential customers to purchase and install qualifying products in their home. The numbers shown on the map are the number of rebates provided by geographic area.



LADWP EQUITY METRIC – *Consumer Rebate Program (Joint)*

RESPONSIBLE MANAGER: Victoria Black EQUITY CORE CATEGORY: Customer Incentive Programs REPORTING PERIOD: Jan 2018 - Oct 2018

1. NARRATIVE / BACKGROUND

The Consumer Rebate Program (CRP) encourages LADWP residential customers to purchase and install qualifying energy efficient products in their home. The CRP offers rebates on comprehensive energy efficiency measures, including whole house solutions, performance standards and opportunities for integration. The CRP rebates reduces the cost for customers who need to purchase either a single measure or multiple measures by encouraging the adoption of energy-efficient choices when purchasing and installing household equipment. This is carried out by offering customers educational materials about energy efficiency options, rebates and other incentive offerings.

2. CRITERIA

- Target market is all residential customers
- Customers who purchase and install qualifying equipment are eligible to participate

3. ACHIEVEMENTS

- The program is meeting the energy savings goals
- The program is within budget
- The program consistently meets the Bill of Rights 30-day review requirement
- All complete, approved application rebates consistently paid out within 30 days from date of approval for the past 6 months
- Improved administrative support has helped expedite payment process
- Paid over 6,170 rebates with energy savings of 9,195,066 kWh
- Developing customer notification process with targeted implementation in Q1 2019

4. ISSUES

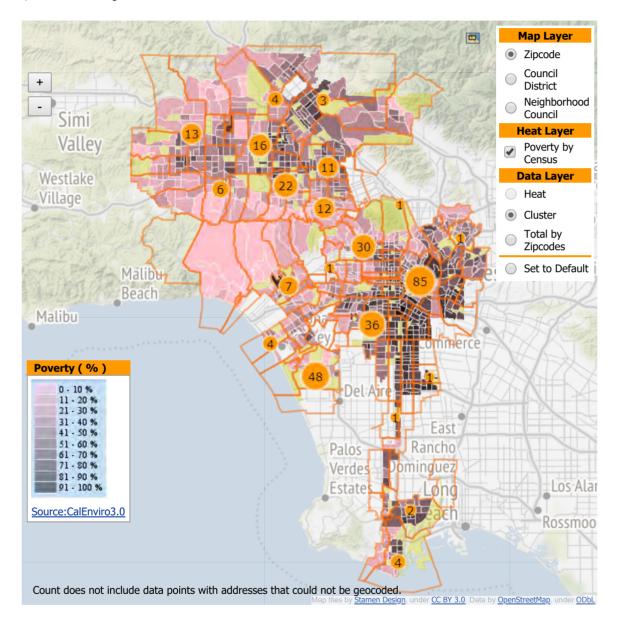
- Lack of automated customer notification system for the purpose of expediting response to customer inquiries for applications submitted by mail
- High number of incomplete applications from customers
- Lack of customer knowledge of product eligibility
- Lack of education for contractors regarding application packet submissions criteria

5. OUTREACH STRATEGY / PLAN

- Current outreach strategy to increase customer awareness of the program consists of utilizing LADWP website, customer contact, service center, Consumer Rebate Program staff, trade events, and LADWP sponsored events.
- Future outreach strategy may include partnering with big box stores to promote rebateeligible products
- Utilize LADWP customer facing facilities to advertise and promote the Consumer Rebate Program

RESPONSIBLE MANAGER:Bassam Abou-Chakra REPORTING PERIOD: Oct 2018 Electric Vehicle Infrastructure Electric Vehicle Infrastructure

LADWP introduced the Electric Vehicle Charger Rebate Program, "Charge Up L.A.!" to encourage the installation of convenient electric vehicle (EV) charging stations at residential and commercial locations in order to support the purchase and the use of EVs. Under the CEC grant project, 185 publically accessible chargers were installed at different city agency facilities (LADOT, LAPD, LAPL, and LAWA). In addition, LADWP has 100 public charging stations at various facilities including 41 pole-mounted charging stations, to ensure that EV drivers have equitable access to EV charging across LADWP territory, with more installations planned or in the works. There is also currently an effort to install 200 curbside chargers for the City's disadvantaged community EV Car Sharing program, BlueLA, of which 115 chargers in 23 locations have been installed.



LADWP EQUITY METRIC - Electric Vehicle Infrastructure (Power)

RESPONSIBLE MANAGER: Scott Briasco July My Power Planning, Development, and Engineering Division EQUITY CORE CATEGORY: Customer Incentive Programs/Services

1. NARRATIVE / BACKGROUND

Source data: Jobs C5175 and P6059 (KPI No. 05.03.03.04)

- The primary program goal is to promote more electric vehicles (EV) in the City of Los Angeles and to have them charging at the right time.
- This program will facilitate EV adoption and usage to support LADWP's Integrated Resource Plan (IRP). According to LADWP's IRP, accelerating transportation electrification is the most impactful component of reducing overall Green House Gases (GHG) emissions.
- Infrastructure Goal: 10,000 commercial chargers in the City of Los Angeles by 2022 through the Los Angeles Department of Water and Power's (LADWP) *Charge-Up LA!* Rebate Program. This includes public, workplace, and multi-unit dwelling (MUD) chargers. Of those chargers, 4,000 will be on City property.
- Off-peak charging is encouraged through Time Of Use (TOU) rates. LADWP is developing a residential smart EV charging pilot to incentivize customers not on the TOU rate to charge at off-peak times.
- Promote EV Adoption through Incentives, Customer Education, Outreach, and Ride and Drive events.
- Provide Positive Customer Experience to encourage purchasing an EV through a seamless and positive process.
- Maintain the utility grid integrity.

2. CRITERIA

 Residential EV charging: LADWP's Charger Rebate program provides residential customers up to \$500 per installed charger and an extra \$250 for a dedicated TOU meter. Commercial EV charging: LADWP's Charger Rebate program provides commercial customers up to \$5,000 per installed charger for up to 40 chargers per property. The rebate amount was increased as of July 1, 2018. This applies to public, workplace, and MUD.

REPORTING PERIOD: October 2018

- Medium and Heavy Duty EV Fleet: LADWP's Charger Rebate program will provide a rebate to medium and heavy duty customers. The rebate amount is to be determined based on vehicle type and charging infrastructure used.
- Install EV charging stations including public, workplace, and fleet chargers at City and LADWP locations based on applications and grants.
- Rebates Terms and Conditions determine eligibility: 1) Level 2 charger with J1772 connector; 2) Recognized electrical testing laboratory approved charger; 3) Proof of EV charger purchase.
- Collaborate with all LA City agencies for grants/rebates installations.
- Administer agreements between third party EV Supply Equipment (EVSE) service providers and LADWP properties.

3. ACHIEVEMENTS

Commercial Charger Installations:

FYTD as of:	Target	Actual	Varia	Re- Estimate	
	Taiget	Actual	Unit	%	
18-Jul	59	21	(38)	-64%	
18-Aug	118	120	2	2%	
18-Sep	177	120	(57)	-32%	
18-Oct	236	227	(9)	-4%	
18-Nov	295				
18-Dec	354				
19-Jan	413				
19-Feb	472				
19-Mar	531				Se
19-Apr	591				
19-May	651				
19-Jun	711				

31

Rebates Issued:

FYTD	Residential	Commercial	Total
as of:			
18-Jul	62	114	176
18-Aug	115	289	404
18-Sep	199	289	488
18-Oct	234	383	617
18-Nov			
18-Dec	1997 - A (in in in the second seco		
19-Jan			and a second
19-Feb	**************************************		5
19-Mar		a service for a filler	
19-Apr			
19-May	. <u></u>		
19-Jun	a sa kata ka		C. (19)

Attachment A indicates the quantity of rebates issued and total charging stations rebated per zip code since August 2013.

4. ISSUES and a substantial state of the assistant

- The EV program is in the process of hiring staff into the seventeen newly approved positions. A team of service planning engineers was reassigned to support the EV program in December 2017. Three positions were filled in April and one in June for program management and facilities engineering. One position was filled in June through the New Engineering Associate Trainee Program for service planning and > one is being requested. Two positions were filled for electric service inspection and meter spotting, and one position for education and outreach was filled in October, One position was filled in September for facilities engineering. Two positions are pending approval of the position description for electric vehicle charger maintenance. Four positions were filled in July and one position was filled in August for charger installations on power poles and meter installations.
- There was a delay in finalizing the terms and conditions for the commercial EV

charger rebate and as a result, the rebate application was not made available until mid August.

- Lengthy rebate process has delayed payments to customers. Many applications are received incomplete. However, it is improving now with further education and outreach. Further solutions are planned for Q4 2018 such as website enhancements, which include process flow diagrams, checklists, and properly completed application samples.
- New Americans with Disabilities Act (ADA) requirements.
- Some LA City Departments do not budget for EV maintenance resulting in neglected faulty chargers. This creates a negative EV experience.
- Some customers cannot afford to front the initial cost of charger installations. A program to provide front funding is being considered.
- Vandalism. a to assess the trade that

and a share a company

 Meter installation has been delayed on many projects which also creates a delay in approving rebate applications.

5. OUTREACH STRATEGY / PLAN

 Outreach efforts will include print collateral in customer centers, website content, social media posts, and ads in customer bills.

A start and a second second

- EV program information will be presented to homeowner associations and at neighborhood council meetings.
- LADWP will participate in a minimum of 4 major EV Events including the National Drive Electric Week, LA Auto Show, and various other ride and drive events.
- LADWP will participate in at least 10 community events to promote electric transportation. Some events already attended by LADWP included the Watts National Drive Electric Week, Larchmont Family Fair, Prove Itl campaign at Calvary Baptist Church and Centro De Vida Victoriosa, the Sherman Oaks Green and Beautification Committee meeting, BlueLA

car sharing launch, and the Earth Day event at Grand Park.

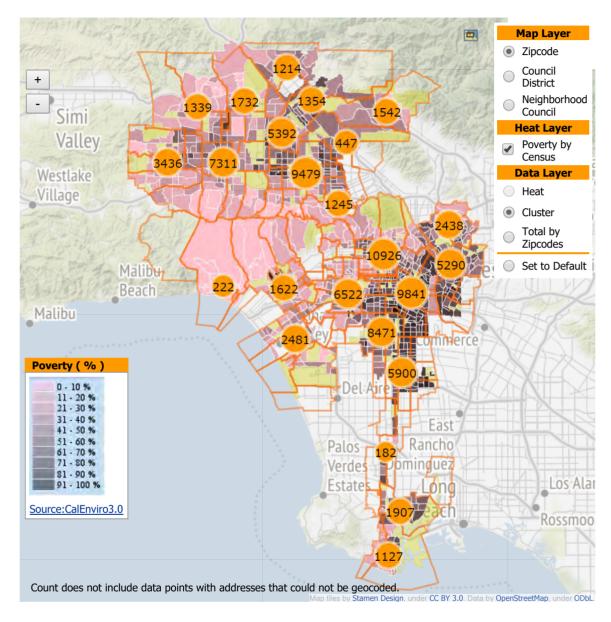
- Membership in CalETC, CalStart, and Veloz to develop and implement critical incentives for our customers such as state EV rebates, and HOV lane access.
- Support legislation and policy through CalETC, CalStart, and Veloz to promote EV adoption.
- Customers can access LADWP's EV Rebate Program through LADWP.com/EV.
 Website improvements to be developed for an improved user experience.
- Improve outreach/public education portion of the Program through targeted marketing and a regional website working with other utilities and Original Equipment Manufacturers (OEMs). Outreach is done partially with the regional effort, and partially with DWP Communications, Marketing & Community Affairs.
- Work with agencies to market Air Quality Management District's (AQMD) modified Rule 2202 to support EV charging.
- Participate in the LA City EV Task Force to promote charging infrastructure installations on other City properties.

33

RESPONSIBLE MANAGER:Kathleen Wright

Lifeline Discount Program

Lifeline Program: Customers who are 62 years of age or older or permanently disabled may qualify, based solely on their income, to have a discount applied to their electric and/or water bills.



LADWP EQUITY METRIC – *Lifeline Discount Metric*

RESPONSIBLE MANAGER: Nasim Ghaffari EQUITY CORE CATEGORY:

REPORTING PERIOD: FY 2018-2019

1. NARRATIVE / BACKGROUND

LADWP has partnered with the City of Los Angeles Office of Finance to offer customers who are 62 years of age or older or permanently disabled a discount on their electric and/or water bills. The program customers receive subsidies of \$17.71 per month (\$35.42 bi-monthly) for electricity and of \$10.00 per month (\$20.00 bimonthly) water. Renters paying for electric service only, are eligible to receive the low income water subsidy credit. These programs are designed to make water and electricity more affordable for qualifying families.

2. <u>CRITERIA</u>

- 1) Residential customer within the City of Los Angeles
- 2) Either
 - a. Senior Citizen 62 years of age or older, or
 - b. Disabled Citizen
- Combined adjusted gross household income of less than \$36,050 for the prior calendar year

*Applications are submitted directly to the City of Los Angeles Office of Finance.

3. ACHIEVEMENTS

- As of October 2018, there are approximately 103,350 participants enrolled in the program
- The Office of Finance periodically reviews and increases the adjusted gross household income amount based on cost of living.

4. ISSUES

• Online application submission process can be challenging

5. OUTREACH STRATEGY / PLAN

Lifeline Applications can be obtained by the following:

- Mailed via contact with Customer Contact Center
- Online at LADWP.com and FINANCE.LACITY.org (available in both English and Spanish)
- Local community outreach events and at any of the 15 Customer Contact Centers
- Call Contact Center employees assist customers with program questions.

Future Plan:

- Increase outreach through governmental agencies
- Increase use of newer technology for faster application submission and approval.

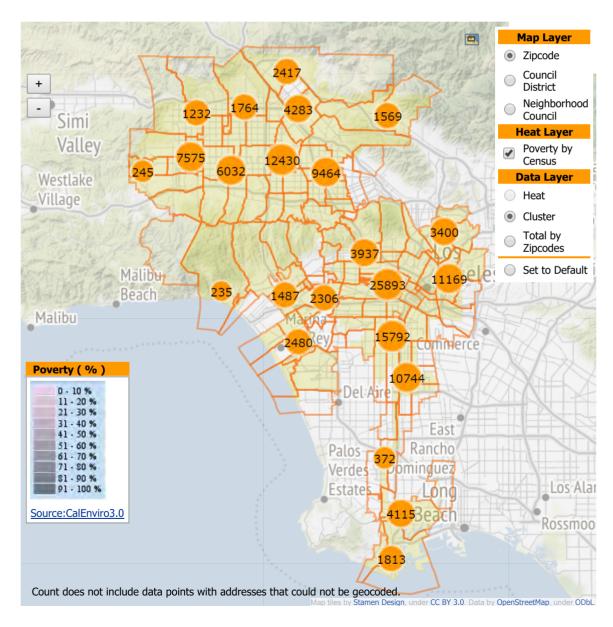
RESPONSIBLE MANAGER:Kathleen Wright	REPORTING PERIOD: Jan 2018 - Oct 2018
Low Income Discount Program	

Low Income Program: Customers may qualify to have a discount applied to their electric and/or water bills based on their income and household size. Household Income Requirements Effective July 1, 2017

Members in Household Maximum Annual Gross Income*

1	\$32,480
2	\$32,480
3	\$40,840
4	\$49,200
5	\$57,560
6	\$65,920
7	\$74,280
8	\$82,640
Each additional member:	Add \$9,320 to incom

Each additional member: Add \$8,320 to income



LADWP EQUITY METRIC – *Low Income Discount Metric*

RESPONSIBLE MANAGER: Nasim Ghaffari EQUITY CORE CATEGORY: REPORTING PERIOD: FY 2018-2019

1. NARRATIVE / BACKGROUND

Since 1991, LADWP has offered a residential discount Low Income Discount rate, for customers with qualifying income levels. Program customers receive subsidies of \$8.17 per month (\$16.34 bi-monthly) for electricity and \$5.00 per month (\$10.00 bi-monthly) for water, increased by a \$1.00 per month for additional occupants above three up to \$10.00 a month. Renters paying for electric service only, are eligible to receive the low income water subsidy credit. The total annual Low Income subsidy is about \$158. This is designed to make water and electricity more affordable for qualifying families.

2. CRITERIA

Income Guidelines*			
Household Size	Income Eligibility Upper Limit		
1-2	\$32,920		
3	\$41,560		
4	\$50,200		
5	\$58,840		
6	\$67,480		
7	\$76,120		
8	\$84,760		
Each Additional Person	\$8,640		
* Effective July 1, 2018 to June 30, 2019			

3. ACHIEVEMENTS

- As of October 2018, there are approximately 130,993 participants enrolled in the program.
- Since 2008, the LADWP has increased the Low Income subsidy from 15% to 20%.

4. ISSUES

- Online applications have a longer processing duration
- Application submission tracking needs to be updated

5. OUTREACH STRATEGY / PLAN

Low Income Applications can be obtained by the following:

- Mailed via contact with Customer Contact Center
- Online at LADWP.com
- Local community outreach events and at any of the 15 Customer Contact Centers

Future Plan:

- Increase outreach through governmental agencies
- Increase use of newer technology for faster application submission and approval.

LADWP EMDI - Procurement

REPORTING PERIOD: Jan 2018 - Oct 2018

RESPONSIBLE MANAGER:Karyn Son LADWP's SBE/DVBE Program

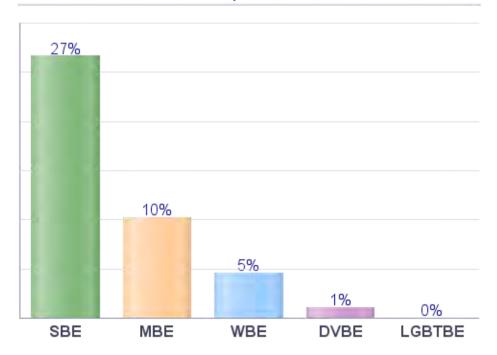
Commitment percentages based on Board-awarded contracts that had SBE/DVBE participation requirements.

Firms with multiple certifications are counted in each category in which they were certified.

Current data reflects a significant change from previous reports due to a correction made in source data.

Cert Status	Dollar Amount	Percentage
SBE	22376213.00	26.60%
MBE	8565227.00	10.20%
WBE	3864996.00	4.60%
DVBE	893619.00	1.10%
LGBTBE	0.00	0.00%

Contract Participation Commitments



LADWP EQUITY METRIC – *Contract Participation (Joint)*

RESPONSIBLE MANAGER: Karyn Son EQUITY CORE CATEGORY: Procurement

1. NARRATIVE / BACKGROUND

The SBE/DVBE Participation Program was adopted to ensure that all businesses have an equal opportunity to do business with the Los Angeles Department of Water and Power. This program is in conformance with the Mayor's Executive Directive No. 14, entitled the Business Inclusion Program.

This metric measures the achievement of SBE/DVBE Participation Program goals, which were set with an overall Department goal of 25% SBE participation and 3% DVBE participation.

This metric also measures the participation commitments of MBE/WBE/LGBTE firms in LADWP Board-awarded contracts.

2. CRITERIA

Mandatory SBE/DVBE participation requirements are set in all construction and service contracts valued over \$150,000.

- Only certified SBEs and DVBEs count toward the fulfilment of the minimum mandatory requirement.
- Failure to meet the minimum mandatory SBE/DVBE participation requirement in bids or proposals results in a finding of nonresponsiveness.
- Failure to achieve the requirement can result in penalties or termination of the contract.

3. ACHIEVEMENTS

- Kicked off the 2018 Small Business Academy at USC with a focus on the professional services sector. 444 applications were received and 32 completed the sessions.
- Hosted LADWP's first WBE networking event, "Accelerating Diversity," on September 26, 2018, to highlight and promote the capabilities of Women Owned Businesses in the greater Los Angeles Area and facilitate networking and strategic connections.

The event provided attendees the following key takeaways:

- Information about upcoming renewable initiatives and contracting opportunities at LADWP, Department of Public Works, Los Angeles World Airports, Metropolitan Water District, and Pasadena Water and Power
- Insight into challenges of doing business with the City of Los Angeles (City) from City officials and current WBE contractors/consultants
- Connections through matchmaking appointments with large prime contractors and networking with contractors, fellow business owners, and agency staff.
- Participation in 22 outreach events.
- Hosted 20 Vendor Introduction Meetings.
- 2018 Contract participation commitment percentages through October 31, 2018:
 - o SBE 26.6%
 - o DVBE 1.1%
 - o MBE 10.2%
 - o WBE 4.6%

4. ISSUES

Reporting is currently done manually as the procurement system does not currently capture the certification status of vendors nor does it capture subcontractor certification status and payment information.

5. OUTREACH STRATEGY / PLAN

2019 Objective for the Office of Small Business and Supplier Relations - To increase the participation of small, veteran, minority, women, and local businesses in LADWP contracts by:

- Initiating a targeted outreach focused on LGBTBEs
- Initiating the LA SBE Academy for class of 2019 in the area of construction and engineering
- Attending 24 outreach events per year

REPORTING PERIOD: January - October 2018

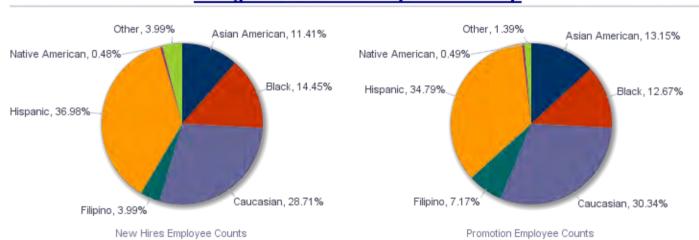
New Hires/Promotions Demographic Composition

	New	Hires	Pron	notion
Ethic Group	F	М	F	М
Asian American	38	82	51	138
Black	72	80	81	101
Caucasian	62	240	55	381
Filipino	8	34	40	63
Hispanic	78	311	130	370
Native American		5	1	6
Other	12	30	7	13
Grand Total	270	782	365	1072

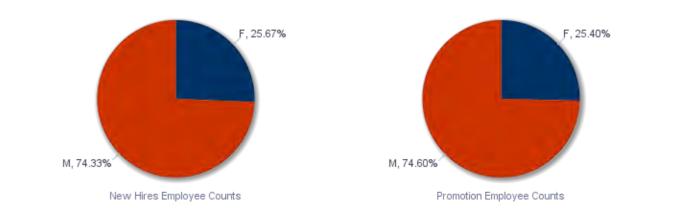
Hiring and Promotions by Ethnic Group

Hiring and Promotions by Gender

Gender	New Hires	Promotion
F	270	365
Μ	782	1072
Grand Total	1052	1437



Hiring and Promotions by Ethnic Group



Hiring and Promotions by Gender

LADWP EQUITY METRIC – *New Hire/Promotion Demographic Composition (Joint)*

RESPONSIBLE MANAGER: Shannon C. Pascual EQUITY CORE CATEGORY: Employment

1. NARRATIVE / BACKGROUND

This provides a demographic breakdown of our new hires and promotions to better understand the representation of various demographic groups within our workforce.

2. CRITERIA

- Ethnicity
- Gender

3. ACHIEVEMENTS

- Interviewed engineering students and professionals at the national and regional conferences of the Society of Women Engineers (SWE), the Society of Hispanic Professional Engineers (SHPE), and the National Society of Black Engineers (NSBE) during January - November 2018. Anticipate interviewing engineering students and professionals at the national conference of NSBE and the regional conferences of SWE and SHPE in Spring 2019.
- Two additional diversity engineering events have been identified, at which we will conduct interviews (Black Engineer of the Year Award (BEYA) and the Grace Hopper Celebration (GHC) annual conferences) in February and October, 2019, respectively.
- Los Angeles Trade Technical College (LATTC) completed the development of an on-line electricity course, which will meet requirements for various targeted Power System skilled craft classifications. This class will be available to high school and community college students.

4. ISSUES

• Lack of gender and ethnic diversity in the engineering and skilled craft classifications.

5. OUTREACH STRATEGY / PLAN

Special recruitment activities include on-site interviewing for engineering classifications at national and regional conferences for the following organizations:

REPORTING PERIOD: January – October 2018

- SWE
- NSBE
- SHPE
- BEYA annual conference
- GHC annual conference

College recruitment has been expanded to include:

- More traditionally African-American colleges and universities (Total of 6 schools anticipated in Spring 2019)
- Local diversity-specific events (Total of 3 SWE events and additional NSBE events anticipated in Spring 2019)

HR Staff will continue to partner with various organizations, including:

- LAUSD and other school districts to establish recruitment and outreach activities at various local high schools for LADWP skilled craft classifications;
- The Los Angeles Community College District (LACCD) and other local community colleges to establish recruitment and outreach activities for interested students to learn about targeted skilled craft classes;
- Women in Non-Traditional Employment Roles (WINTER) and Tradeswomen, Inc. to work toward an event for women in the trades;
- LADWP Marketing Division to increase advertising opportunities and outreach on social media (Facebook, Instagram, Spotify).