



Los Angeles
Department of
Water & Power

INFORMATIONAL BOARD LETTER

A handwritten signature in blue ink, appearing to read 'Ann M. Santilli', written over a horizontal line.

ANN M. SANTILLI
Chief Financial Officer

A handwritten signature in blue ink, appearing to read 'Sergio Perez', written over a horizontal line.

SERGIO PEREZ
Inspector General

A handwritten signature in blue ink, appearing to read 'Martin L. Adams', written over a horizontal line.

MARTIN L. ADAMS
General Manager and Chief Engineer

DATE: August 8, 2022

SUBJECT: LADWP Rates Metrics Semi-Annual Report

SUMMARY

Attached is the semi-annual report on Rates 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 detailed information is provided in this Informational Board Letter under section Rates Metrics.

RATES METRICS

Rates Metrics 2021-2022 (Fiscal-Year-To-Date April 2022)

The Rates Metrics currently include 16 for Water System, 29 for Power System, and 14 for Joint System. A summary of the fiscal-year-to-date April 2022 performance status of all these metrics is listed in the Rates Metrics Summary (Attachment I).

LADWP Rates Metrics Status (Fiscal Year to Date April 2022)		
Performance Status		# Metrics
Exceeds Target	Blue	3
Within Acceptable Variance	Green	32
Outside Acceptable Variance	Red	14
Needs Attention	Yellow	2
Information Only	White	8
Total		59

For the period ending April 2022, 59 percent of the metrics are either within the acceptable variance or exceed the target.

Fourteen of the fifty-nine Rates Metrics are outside the acceptable variance. Explanations for metrics outside the acceptable variance include:

Power System

Metric	Variance	Explanation
Average Cost of Power System Training Plan per Electrical Mechanic Trainee	66.2% (\$366.2K/trainee)	<ul style="list-style-type: none"> The monthly cost per trainee varies from month to month based on a number of factors including class size, dropout, terminations, and the final number of graduates. The cost per trainee is higher due to increased spending in classroom training for Electrical Mechanic trainees.
Number of Full Time Equivalents for Power Distribution field positions as compared to plan	35.1%	<ul style="list-style-type: none"> Majority of vacancies are currently being held for employees on emergency appointments, special assignments, successful completion of probation, temporary assignments, and trainees in substitute positions. Hiring delays and attrition in Electric Distribution Mechanic and Electrical Craft Helper positions.

Metric	Variance	Explanation
Power System Reliability Program (PSRP) Generation Capital (Budget vs. Actual)	-25.0% (-\$4.8M)	<ul style="list-style-type: none"> Costs for materials and electrical repair services should increase by end of calendar year. Once Harbor Generating Station Unit 2 Scheduled Inspection & Repair is complete, actuals should align with fiscal year budget. Cranes at Aqueduct Power Plant are out of order and staff are not able to perform the inspections and overhauls, causing an underrun.
PSRP Substation Capital (Budget vs. Actual)	-21.8% (-\$22.6M)	<ul style="list-style-type: none"> Underspending due to lack of Construction and Test Lab resources and competing capital jobs. Electrical Construction has implemented several efforts to hire more Electrical Construction workers, including implementing a shorter training program (currently 48 months), hiring exempt workers when feasible, and graduating up to 60 Electrical Mechanics per year. However, Electrical Construction is still feeling the effects of hiring in 2020 due to COVID and multiple competing capital jobs, including out-of-basin Major Projects. An ongoing IHRP effort is set up to align the budget process with staffing needs.
Distribution Automation Project (Budget vs. Actual)	-36.7% (-\$13.5M)	<ul style="list-style-type: none"> The program has experienced delays with installation of the communication equipment and delays with equipment delivery. This is due to late receipt from vendors and global supply chain issues. Initial equipment has been received, but supply chain issues continue to be a potential issue in the case of project change orders. Installations have ramped up with new installation crews, and a reduction in the year end spending forecasting brings the new target to \$23.6M.

Water System

Metric	Variance	Explanation
Number of Full Time Equivalent hired and dedicated to Water Distribution field positions as compared to plan	95.2%	<ul style="list-style-type: none"> Due to internal transfers, promotions, and attrition, the division has been unable to reduce the number of field vacancies. The Division will continue hiring efforts to reduce the number of vacant positions to reach the revised goal of 106 vacancies or less by end of fiscal year.

Metric	Variance	Explanation
Water Supply Costs - Capital (Budget vs. Actual)	-51.2% (-36.8M)	<ul style="list-style-type: none"> Watershed Stormwater Capture jobs are below budgeted levels due to the cancellation of the Whitnall Highway Stormwater Capture Project, Hansen Dam Water Conservation Project, and Silver Lake Stormwater Capture Project. Contributing to the underrun are projects being performed by the Bureau of Engineering through lump sum payments.
Aqueduct refurbishment Capital (Budget vs. Actual)	-33.7% (\$-8.5M)	<ul style="list-style-type: none"> Aqueduct capital is expected to be below target at fiscal year-end. Several capital projects have been postponed due to delays in planning and permitting, such as the North Haiwee Dam Project and Grant Lake Roto Valve Project. The scope of work for the Grant Lake Roto Valve Project is still being negotiated.
Trunk Line Replacement	-22.5%	<ul style="list-style-type: none"> Century Trunk Line Phase 1 installation experienced delays due to Caltrans permit. City Trunk Line South Unit 3 experienced delays due to unforeseen interfering substructures. Foothill Trunk Line experienced delays due to unforeseen soil conditions. Coronado Trunk Line experienced delays due to labor resource shortage. City Trunk Line North Unit 2 experienced delays due to La Brea leak repairs.

Joint System

Metric	Variance	Explanation
Total Number of Occupied Full-Time Equivalent positions (FTEs) Against Plan	-17.0%	<ul style="list-style-type: none"> The variance is caused by increased APR for Fiscal Year 21-22. Acceptable variance target is expected to be achieved as Systems fill positions to their APR levels.
Financial and Human Resources Replacement Project (Budget vs. Actual)	-54.9% (\$-33.5M)	<ul style="list-style-type: none"> Progress was temporarily delayed while LADWP reprioritized critical projects and hired needed resources Enterprise Resource Planning labor expenditures were below approved budget levels as hiring for additional positions continues Planning Stage sign-off was delayed pending final review of deliverables
Cyber Security Capital Projects (Budget vs. Actual)	-16.3% (\$-2.0M)	<ul style="list-style-type: none"> A number of invoices are also still outstanding due to minor billing related issues which are actively being addressed.

Metric	Variance	Explanation
Customer Information System (CIS) Upgrades (Budget vs. Actual)	-52.2% (-\$7.7M)	<ul style="list-style-type: none"> Labor costs are lower due to delays in hiring activity to fill vacant positions. Professional services costs are lower due to delays encountered in the submission of a number of invoices by the vendors.
Energy Efficiency Portfolio (Budget vs. Actual)	-18.3% (-\$26.8M)	<ul style="list-style-type: none"> Energy Efficiency Programs have slowly ramped up after some programs resumed in June 2021. However, other programs have yet to resume, like the Home Energy Improvement Program (HEIP); and the Comprehensive Affordable Multi-Family Retrofits Program that was just recently launched. The budget will remain underspent by the rest of the FY by about 30%.

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 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.

ATTACHMENTS

- LADWP Rates Metrics Summary 2021-2022 Fiscal Year to Date April 2022 (Attachment I)

ATTACHMENT I
LADWP Rates Metrics Summary
2021-2022 Fiscal Year To Date
(April 2022)

LADWP RATES METRICS SUMMARY

Related Rate Adjustment Factor	Category	#	Board Metric	Definition	FY 21/22 Target	Acceptable Variance	Responsible Manager	April 2022 Performance
Reliability Cost Adjustment Factor	Power System Training Plan	1	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: \$700.5K	+/- 25%	Brian Williams	-5.6%
	Power System Training Plan	2	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: \$553.1K	+/- 25%	Brian Williams	66.2%
	Power System Training Plan	3	Number of trainee graduates against Power System Training Plan	Number of Electric Distribution Mechanic Technician (EDMT) trainees that graduate from each respective training program against the annual training plan	EDMT: 23	+/- 15%	Brian Williams	34.8%
	Power System Training Plan	4	Number of trainee graduates against Power System Training Plan	Number of Electrical Mechanic Technician (EMT) trainees that graduate from each respective training program against the annual training plan	EMT: 30	+/- 15%	Brian Williams	16.7%
None	Power Distribution Staffing Program	5	Number of Full Time Equivalents (FTEs) for Power Distribution field positions as compared to plan	Number of Full Time Equivalents (FTEs) for Power Distribution field positions as compared to plan	Vacant budgeted Power Distribution field positions at 443 vacancies or less by the end of the fiscal year	+/- 15%	Brian Wilbur	35.1%
Energy Cost Adjustment Factor	Renewable Portfolio Standard (Owned)	6	Renewable Portfolio Standard (RPS) Percentage (%)	GWh from RPS plants/GWh for all customers (State requirement)	35.75% for Calendar Year 2021 38.50% for Calendar Year 2022	+/- 3% of each calendar year's goal toward state law mandates	Steven Pruet	-0.4%
	Renewable Portfolio Standard (Owned)	7	Total RPS cost (\$/MWh) vs. plan, by technology (Wind)	Total RPS purchased power cost (\$/MWh) as compared to plan, by technology (Wind)	Wind: \$110.08/MWh	+/- 15%	Marlon Santa Cruz	-5.4%
	Renewable Portfolio Standard (Owned)	8	Total RPS cost (\$/MWh) vs. plan, by technology (Solar)	Total RPS purchased power cost (\$/MWh) as compared to plan, by technology (Solar)	Solar: \$71.93/MWh	+/- 15%	Marlon Santa Cruz	-1.4%
	Renewable Portfolio Standard (Owned)	9	Total RPS cost (\$/MWh) vs. plan, by technology (Geothermal)	Total RPS purchased power cost (\$/MWh) as compared to plan, by technology (Geothermal)	Geothermal: \$80.28/MWh	+/- 15%	Marlon Santa Cruz	-3.8%
	Renewable Portfolio Standard (Owned)	10	Last signed power purchase agreement (PPA) (\$/MWh) by technology (Wind)	Last signed PPA (\$/MWh) by technology (Wind)	Wind: \$28.20/MWh	+30%	Marlon Santa Cruz	-9.6%
	Renewable Portfolio Standard (Owned)	11	Last signed PPA (\$/MWh) by technology (Solar)	Last signed PPA (\$/MWh) by technology (Solar)	Solar: \$28.20/MWh	+15%	Marlon Santa Cruz	-30.2%
	Renewable Portfolio Standard (Owned)	12	Last signed PPA (\$/MWh) by technology (Geothermal)	Last signed PPA (\$/MWh) by technology (Geothermal)	Geothermal: \$81.00/MWh	+15%	Marlon Santa Cruz	-6.8%

Within Acceptable Variance ■
 Outside Acceptable Variance ■
 Exceeds Target ■
 Needs Attention ■

Related Rate Adjustment Factor	Category	#	Board Metric	Definition	FY 21/22 Target	Acceptable Variance	Responsible Manager	April 2022 Performance
Reliability Cost Adjustment Factor	Power System Reliability Program (Generation)	13	Budget vs. actual (\$M) for capital in the Generation budget	Board Approved Annual Budget vs. Actual expenditures	FY21/22 Board Approved Budget - May 2021	+/- 15%	Robert Fick	-25.0%
	Power System Reliability Program (Transmission)	14	Budget vs. actual (\$M) for capital included in the Transmission budget	Board Approved Annual Budget vs. Actual expenditures	FY21/22 Board Approved Budget - May 2021	+/- 15%	Pjoy Chua	8.2%
		15	Budget vs. actual (\$M) for O&M expenses included in the Transmission budget	Board Approved Annual Budget vs. Actual expenditures	FY21/22 Board Approved Budget - May 2021	+/- 15%	Ruben Hauser	14.0%
	Power System Reliability Program (Substation)	16	Budget vs. actual (\$M) for capital in the Substation budget	Board Approved Annual Budget vs. Actual expenditures	FY21/22 Board Approved Budget - May 2021	+/- 15%	Sharat Batra	-21.8%
		17	Budget vs. actual (\$M) for O&M expenses in the Substation budget	Board Approved Annual Budget vs. Actual expenditures	FY21/22 Board Approved Budget - May 2021	+/- 15%	Jonathan Fonti	-2.0%
	Power System Reliability Program (Distribution)	18	Budget vs. actual (\$M) for capital in the Distribution budget	Board Approved Annual Budget vs. Actual expenditures	FY21/22 Board Approved Budget - May 2021	+/- 15%	Vincent Zabukovec	-6.1%
		19	Budget vs. actual (\$M) for O&M expenses in the Distribution budget	Board Approved Annual Budget vs. Actual expenditures	FY21/22 Board Approved Budget - May 2021	+/- 15%	Ruben Hauser	-10.4%
	Power System Reliability Program (Distribution)	20	Number of fixed assets replaced against plan for critical Distribution assets (Transformers)	Numbers of transformers replaced against plan	Transformer: 1,050	+/- 15%	Ruben Hauser	6.4%
		21	Number of fixed assets replaced against plan for critical Distribution assets (Poles)	Numbers of poles replaced against plan	Pole: 3,500	+/- 15%	Ruben Hauser	7.1%
		22	Number of fixed assets replaced against plan for critical Distribution assets (Crossarms)	Numbers of crossarms replaced against plan	Cross-arm: 11,000	+/- 15%	Ruben Hauser	-1.5%
		23	Number of fixed assets replaced against plan for critical Distribution assets (Cable)	Numbers of miles of cable replaced against plan	Cable: 50 miles	+/- 15%	Vincent Zabukovec	11.0%
	Power System Reliability Program (Distribution)	24	Average unit price for critical Distribution assets (Transformers)	Average unit price per transformer	Transformer: \$9.1k	+/- 15%	David Hanson	-3.3%
		25	Average unit price for critical Distribution assets (Poles)	Average unit price per pole	Pole: \$33.9k	+/- 15%	David Hanson	4.1%
		26	Average unit price for critical Distribution assets (Cross-arms)	Average unit price per cross-arm	Cross-arm: \$1.7k	+/- 15%	David Hanson	-29.4%
27		Average unit price for critical Distribution assets (Cable)	Average unit price per mile of cable	Cable: \$1,331.7k	+/- 15%	David Hanson	7.9%	
None	Distribution Automation Project	28	Distribution Automation Project total spending against plan	Board Approved Annual Budget vs. Actual expenditures	FY21/22 Board Approved Budget - May 2021	+/- 15%	Kodi Uzomah	-36.7%

Within Acceptable Variance ■ Outside Acceptable Variance ■ Exceeds Target ■ Needs Attention ■

Related Rate Adjustment Factor	Category	#	Board Metric	Definition	FY 21/22 Target	Acceptable Variance	Responsible Manager	April 2022 Performance
None	Distribution Automation Project progress	29	Distribution Automation Project progress against schedule	Project milestones met against project schedule	Project Milestones and Dates: Target date: FY 21/22 Qtr 1 (Jul 2021 – Sept 2021) - Receive Distribution Automation smart meters. Target date: FY 21/22 Qtr 2 (Oct 2021-Dec 2021) - Begin Installation of Distribution Automation smart meters. Target date: FY 21/22 Qtr 3 (Jan 2022-Mar 2022) - Complete installation of pole top communication equipment; and Complete construction of DS-36. Target date: FY 21/22 Qtr 4 (Apr 2022-Jun 2022) - Complete system integration.	Info only	Kodi Uzomah	N/A
None	Water Distribution Staffing Program	30	Number of Full Time Equivalents (FTEs) for Water Distribution dedicated to infrastructure field positions as compared to plan	Number of FTEs hired and dedicated to Water Distribution field position as compared to plan	Vacant budgeted Water Distribution infrastructure field positions at 43 vacancies or less by the end of the fiscal year	+/- 15%	Breonia Lindsey/Sandra Foster	95.2%
Water Supply Cost Adjustment Factor	Water Supply	31	Water supply costs budget vs. actual (\$M) for capital expenditures	Board Approved Annual Budget vs. Actual expenditures	FY21/22 Board Approved Budget - May 2021	+/- 10%	April Thang	-51.2%
	Water Supply	32	Water supply costs budget vs. actual (\$M) for O&M (excluding Purchased Water costs)	Board Approved Annual Budget vs. Actual expenditures	FY21/22 Board Approved Budget - May 2021	+/- 10%	April Thang	-2.3%
	Water Supply	33	Annual quantity of purchased water in acre-feet (AF) against plan	AF of water purchased against plan	No Target	Info only	April Thang	NA
	Water Supply	34	Annual quantity of recycled water delivered against plan (AF)	AF of recycled water delivered against plan	No Target	Info only	Jianping Hu	NA
	Water Supply	35	Stormwater system capacity milestones (AF) against plan	AF of stormwater system capacity as of a milestone date against plan	83,000 AFY	+/- 10%	David R. Pettijohn	0.6%
	Capital Improvement Program	36	Budget vs. actual (\$M) for Aqueduct refurbishment capital	Board Approved Annual Budget vs. Actual expenditures	FY21/22 Board Approved Budget - May 2021	+/- 10%	Darin Willey	-33.7%
	Capital Improvement Program	37	Budget vs. actual (\$M) for Aqueduct refurbishment O&M	Board Approved Annual Budget vs. Actual expenditures	FY21/22 Board Approved Budget - May 2021	+/- 10%	Darin Willey	13.9%
	Water Supply	38	Level of water conservation against target (GPCD)	Gallons per capita per day (GPCD) of water conserved against target	106 Gallons	+/- 10%	Terrence McCarthy	5.7%
Water Infrastructure Adjustment Factor	Capital Improvement Program	39	Budget vs. actual (\$M) for fixed assets replacement	Board Approved Annual Budget vs. Actual expenditures	FY21/22 Board Approved Budget - May 2021	+/- 10%	April Thang	7.5%
	Capital Improvement Program	40	Assets replaced against plan	Feet of mainline replaced against plan	Mainline: 195,000 Feet	+/- 10%	Mainline & Meters: Breonia Lindsey/Sandra Foster	-0.1%
	Capital Improvement Program	41	Assets replaced against plan	Feet of trunkline replaced against plan	Trunkline: 10,700 Feet	+/- 10%	Trunkline: Jianping Hu	-22.5%
	Capital Improvement Program	42	Assets replaced against plan	Number of meters replaced against plan	Meters: 32,500	+/- 10%	Mainline & Meters: Breonia Lindsey/Sandra Foster	4.8%

Within Acceptable Variance ■ Outside Acceptable Variance ■ Exceeds Target ■ Needs Attention ■

Related Rate Adjustment Factor	Category	#	Board Metric	Definition	FY 21/22 Target	Acceptable Variance	Responsible Manager	April 2022 Performance
Water Quality Improvement Adjustment Factor	Water Quality Projects	43	Total Water Quality Budget vs. actual (\$M) for capital	Board Approved Annual Budget vs. Actual expenditures	FY21/22 Board Approved Budget - May 2021	+/- 10%	Jianping Hu	11.2%
Water Quality Improvement Adjustment Factor	Water Quality Projects	44	Total Water Quality Budget vs. actual (\$M) for O&M	Board Approved Annual Budget vs. Actual expenditures	FY21/22 Board Approved Budget - May 2021	+/- 10%	Nelson Mejia	1.7%
Owens Valley Regulatory Adjustment Factor	Owens Valley	45	Budget vs. actual for Owens Lake O&M (\$M)	Board Approved Annual Budget vs. Actual expenditures	No Target	Info only	Paul Liu	NA
	Human Resources	46	Human Resources Total FTEs against plan	Total number of full time equivalent positions occupied vs. annual Authorized Personnel Resolution	FY21/22 Board Approved Annual Authorized Personnel Resolution - May 2021	+/- 15%	Monique Earl	-17.0%
	Financial and Human Resources Replacement Project	47	Financial and Human Resources Replacement Project total spending against plan	Board Approved Annual Budget vs. Actual expenditures	FY21/22 Board Approved Budget - May 2021	+/- 20%	Rita Khurana-Carwile	-54.9%
	Financial and Human Resources Replacement Project	48	Financial and Human Resources Replacement Project progress against schedule	Project milestones met against project schedule	ERP Project Kick-Off April 2021 Phase 1: Plan Stage Completion Sept 2021 Phase 1: Architect Stage Completion May 2022	Info only	Rita Khurana-Carwile	NA
	Cyber Security Capital Projects	49	Budget vs. Actual (\$M) for Cyber Security Capital Projects	Board Approved Annual Budget vs. Actual expenditures	FY21/22 Board Approved Budget - May 2021	+/- 15%	Stephen Kwok	-16.3%
	Customer Information System Upgrades	50	Budget vs. Actual (\$M) for Customer Information System (CIS) Upgrades, Enhancements and System Integrations	Board Approved Annual Budget vs. Actual expenditures	FY21/22 Board Approved Budget - May 2021	+/- 15%	Annamae Peji	-52.2%
	Information Technology Services Staffing Program	51	Number of Full Time Equivalents (FTEs) for Information Technology Services (ITS) as compared to plan	Number of FTEs for ITS employed as compared to plan	Vacant budgeted ITS positions at 50 vacancies or less by the end of the fiscal year	+/- 15%	Mark S. Northrup	-8.3%
	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	FY21/22 Board Approved Budget - May 2021	+/- 15%	LADWP Senior Management	-7.8%
	Water Distribution Employees per Water Customer Meter	53	Total Number of Water Distribution Employees per Water Customer Meter	Total number of water distribution employees (excluding daily exempt and Utility Pre-Craft Trainees) per water customer meters	No Target	Info only	Corporate Performance	NA
	Power Distribution Employees per Power Customer Meter	54	Total Number Power Distribution Employees per Power Customer Meter	Total number of power distribution employees (excluding daily exempt and Utility Pre-Craft Trainees) per electric customer meters	No Target	Info only	Corporate Performance	NA
	LADWP Employees per Customer Meter	55	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

Within Acceptable Variance ■ Outside Acceptable Variance ■ Exceeds Target ■ Needs Attention ■

Related Rate Adjustment Factor	Category	#	Board Metric	Definition	FY 21/22 Target	Acceptable Variance	Responsible Manager	April 2022 Performance
Energy Cost Adjustment Factor	Renewable Portfolio Standard (Owned)	56	Green House Gas (GHG) emissions reduction ratio	GHG emission for current year/GHG emission in 1990 (in millions of metric tons)	Calendar Year 2021: 57% below LADWP's 1990 levels Calendar Year 2022: 60% below LADWP's 1990 levels	+/- 5%	Mark Sedlacek/ Katherine Rubin	42.0%
Energy Cost Adjustment Factor	Energy Efficiency	57	Energy Efficiency (EE) ratio (%)	GWh installed compared to the 2020 baseline/GWh for all customers	1.50%	+/- 15%	David Jacot	-12.9%
	Energy Efficiency	58	Budget vs. actual (\$M) for the overall EE portfolio	Board Approved Annual Budget vs. Actual expenditures	FY21/22 Board Approved Budget - May 2021	+/- 15%	David Jacot	-18.3%
	Energy Efficiency	59	Levelized EE program costs (\$/kWh)	Cost per kWh over lifetime of installed energy efficiency solutions	Annual metric: Levelized Cost \$0.06/kWh	+/- 15%	David Jacot	

Within Acceptable Variance ■
 Outside Acceptable Variance ■
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 Needs Attention ■

Power System

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

RESPONSIBLE MANAGER: Brian Williams, Power System Training

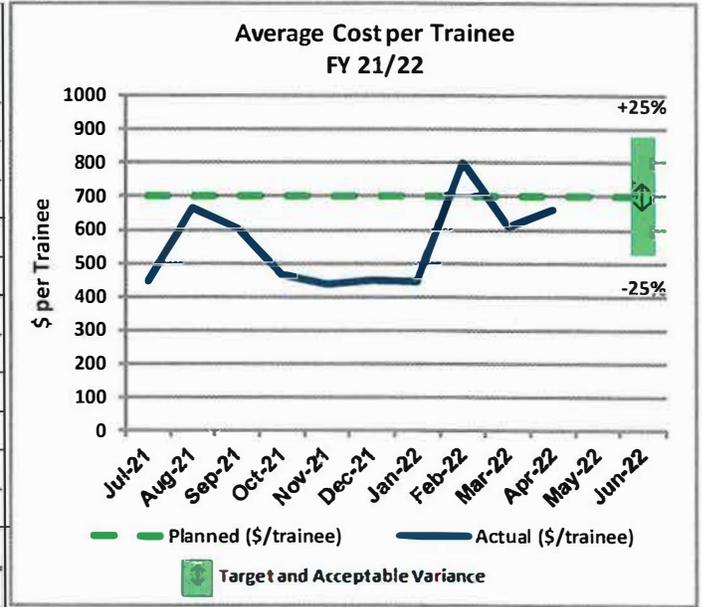
REPORTING PERIOD: April 2022

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 21/22): Target = \$700.5 per EDMT; Acceptable Variance = ± 25%

STATUS: Within Acceptable Variance

FYTD as of:	Planned (\$/trainee)	Actual (\$/trainee)	Variance		Re-Estimate
			\$	%	
Jul-21	700.5	444.3	(256.2)	-36.6%	
Aug-21	700.5	665.9	(34.6)	-4.9%	
Sep-21	700.5	604.4	(96.1)	-13.7%	
Oct-21	700.5	465.8	(234.7)	-33.5%	
Nov-21	700.5	435.5	(265.0)	-37.8%	
Dec-21	700.5	448.2	(252.3)	-36.0%	
Jan-22	700.5	444.1	(256.4)	-36.6%	
Feb-22	700.5	797.6	97.1	13.9%	
Mar-22	700.5	607.6	(92.9)	-13.3%	
Apr-22	700.5	661.4	(39.1)	-5.6%	
May-22	700.5				745.1
Jun-22	700.5				745.1
Acceptable Variance			± 25%		



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

1. BACKGROUND / PURPOSE

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

2. ACHIEVEMENTS / MILESTONES MET

- The past classes average success rates are based on two calendar years as follows:
 - 2014 to 2015: 56%
 - 2016 to 2017: 59%
 - 2018 to 2019: 60%
 - 2020 to 2021: 63%

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- The monthly CPT 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 Actual CPT is higher this month as compared to March due to increased spending in the Classroom Trainers for EDM Trainees (X7999) job. The main driver for

the higher CPT is the increased Allocations for X7999.

- Annualized Job totals for (X7922/X7999/X7955) vary depending on the tools and materials purchased for subsequent new classes.
- The Re-Estimate of \$745.1k was calculated using the final figures of the related jobs (X7922/X7999/X7955) for the entire fiscal year 20/21 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. EDM trainee candidates are now required to complete two performance tests during the initial certification interviews.

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

RESPONSIBLE MANAGER: Brian Williams, Power System Training

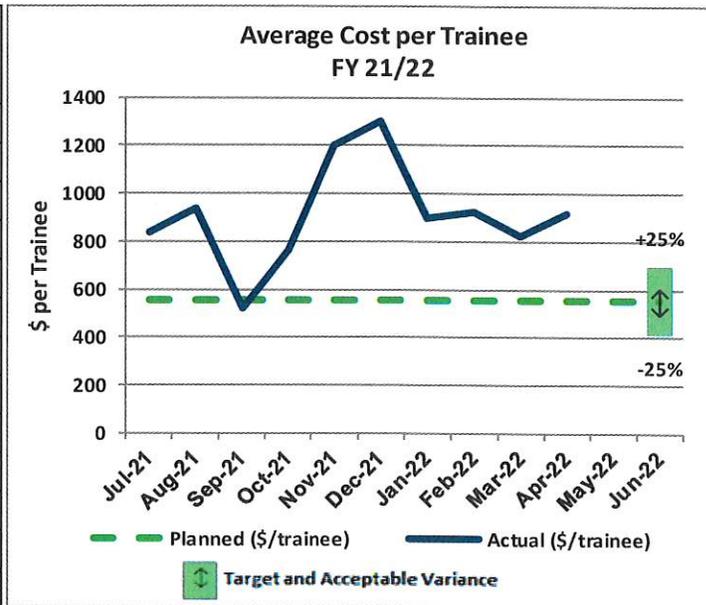
REPORTING PERIOD: April 2022

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 21/22): Target = \$553.1K per EMT; Acceptable Variance = ± 25%

STATUS: Outside Acceptable Variance

FYTD as of:	Planned (\$/trainee)	Actual (\$/trainee)	Variance		Re-Estimate
			\$	%	
Jul-21	553.1	836.4	283.3	51.2%	
Aug-21	553.1	938.7	385.6	69.7%	
Sep-21	553.1	521.3	(31.8)	-5.7%	
Oct-21	553.1	762.1	209.0	37.8%	
Nov-21	553.1	1,199.0	645.9	116.8%	
Dec-21	553.1	1,303.3	750.2	135.6%	
Jan-22	553.1	895.7	342.6	61.9%	
Feb-22	553.1	924.5	371.4	67.1%	
Mar-22	553.1	821.1	268.0	48.5%	
Apr-22	553.1	919.3	366.2	66.2%	
May-22	553.1				600.9
Jun-22	553.1				600.9
Acceptable Variance			± 25%		



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

1. BACKGROUND / PURPOSE

- To effectively calculate a monthly cost per trainee (CPT) for an Electrical Mechanic (EM) completing a 48-month on-the-job and classroom training program. The EM Training Program has changed from a 40-month program to a 48-month program.

2. ACHIEVEMENTS / MILESTONES MET

- The past classes average success rates are based on two calendar years as follows:
 - 2014 to 2015: 70%
 - 2016 to 2017: 85%
 - 2018 to 2019: 89%
 - 2020 to 2021: 75%

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- The monthly CPT 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 Actual CPT is higher this month as compared to March due to an increased spending in Classroom Training for EM

Trainees (X7923) and Classroom trainers for EM Trainees (X7926). The main driver for the higher CPT is the increased Allocations for X7926.

- Annualized Job totals for (X7923/X7926/X7955) vary depending on the tools and materials purchased for subsequent new classes.
- The Re-Estimate of \$600.9k was calculated using the final figures of the related Jobs (X7923/X7926/X7955) for the entire fiscal year 20/21 with the 12-month average trainee occupancy.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

- The screening process and all recruitment activities are continually being reviewed in an effort to increase the quality of candidates and to reduce the dropout rate. The Truesdale Training Center staff now works with the Personnel Department to evaluate potential new EM trainee candidates.

LADWP RATES METRIC – EDMT Graduates (Power)

RESPONSIBLE MANAGER: Brian Williams, Power System Training

REPORTING PERIOD: April 2022

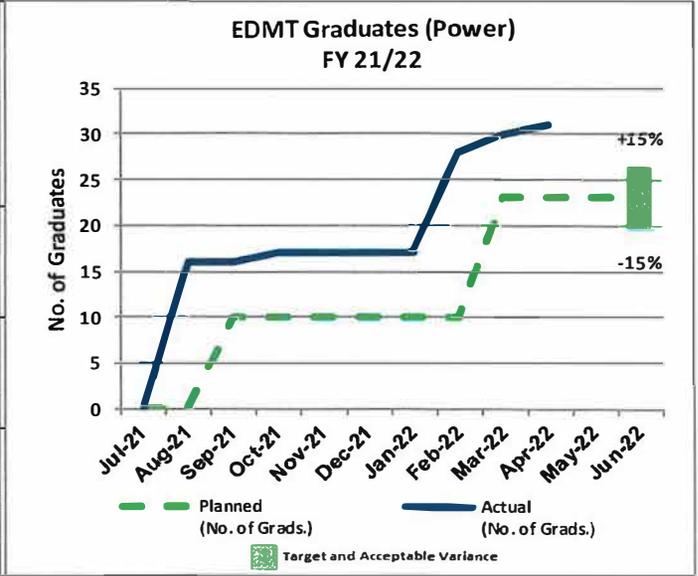
DEFINITION OF RATES METRIC: Electric Distribution Mechanic Trainee (EDMT) Graduates Against Training Plan

TARGET & ACCEPTABLE VARIANCE (FY 21/22): Target = 23 graduates; Acceptable Variance = ± 15%



STATUS: Exceeds Target

FYTD as of:	Planned (No. of Grads.)	Actual (No. of Grads.)	Variance		Re-Estimate
			No.	%	
Jul-21	0	0	0	0.0%	
Aug-21	0	16	16	100.0%	
Sep-21	10	16	6	60.0%	
Oct-21	10	17	7	70.0%	
Nov-21	10	17	7	70.0%	
Dec-21	10	17	7	70.0%	
Jan-22	10	17	7	70.0%	
Feb-22	10	28	18	180.0%	
Mar-22	23	30	7	30.4%	
Apr-22	23	31	8	34.8%	
May-22	23				31
Jun-22	23				31
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 (PSST) provides the Department with an in-house Training Program 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

- In the FY 20/21, a total of 26 EDMs graduated.
- The past classes average success rates are based on two calendar years as follows:
 - 2014 to 2015: 56%
 - 2016 to 2017: 59%
 - 2018 to 2019: 60%
 - 2020 to 2021: 63%
- In FY 21/22, 17 of the 18 EDMTs who started from Class 60 have graduated as EDMs yielding a 94% success rate.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- 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.
- There are currently seven active trainee classes in the Training Program. For the current FY 21/22, no additional EDM graduates are pending beyond the 31 already indicated.

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. EDMT candidates are now required to complete two performance tests during the initial certification interviews.

LADWP RATES METRIC – EMT Graduates (Power)

RESPONSIBLE MANAGER: Brian Williams, Power System Training

REPORTING PERIOD: April 2022

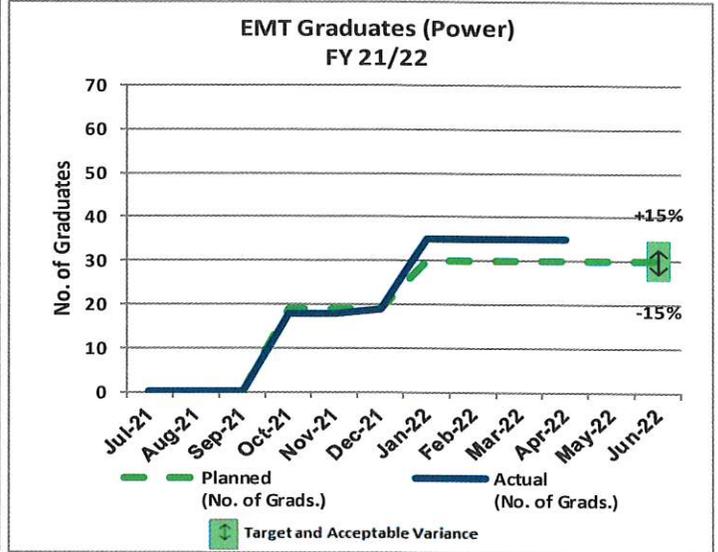
DEFINITION OF RATES METRIC: Electrical Mechanic Trainee (EMT) Graduates Against Training Plan

TARGET & ACCEPTABLE VARIANCE (FY 21/22): Target = 30 graduates; Acceptable Variance = ± 15%



STATUS: Exceeds Target

FYTD as of:	Planned (No. of Grads.)	Actual (No. of Grads.)	Variance		Re-Estimate
			No.	%	
Jul-21	0	0	0	0.0%	
Aug-21	0	0	0	0.0%	
Sep-21	0	0	0	0.0%	
Oct-21	19	18	(1)	-5.3%	
Nov-21	19	18	(1)	-5.3%	
Dec-21	19	19	0	0.0%	
Jan-22	30	35	5	16.7%	
Feb-22	30	35	5	16.7%	
Mar-22	30	35	5	16.7%	
Apr-22	30	35	5	16.7%	
May-22	30				35
Jun-22	30				35
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 (PSST) 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 continue with the aggressive hiring schedule to add approximately 40 to 60 EMTs per year until 2024, and to streamline the Training Program to meet the goals of the Power System and PC&M Division.

2. ACHIEVEMENTS / MILESTONES MET

- In the FY 20/21, a total of 66 EMTs graduated.
- The past classes average success rates are based on two calendar years as follows:
 - 2014 to 2015: 70%
 - 2016 to 2017: 85%
 - 2018 to 2019: 89%
 - 2020 to 2021: 75%

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- Hiring deficiencies from 2010 through 2013 have resulted in minimal numbers of graduates in recent years.
- There are currently nine active trainee classes in the Training Program. One trainee class is expected to graduate in July 2022 with a projected 13 graduates.
- 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. Recently, a higher than expected number of trainees graduated from class 22A resulting in a 89% graduation rate.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

- There is an aggressive hiring plan to add approximately 40 to 60 EMTs per year until 2024 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.

LADWP RATES METRIC – POWER DISTRIBUTION INFRASTRUCTURE POSITIONS (POWER)

RESPONSIBLE MANAGER: Brian Wilbur

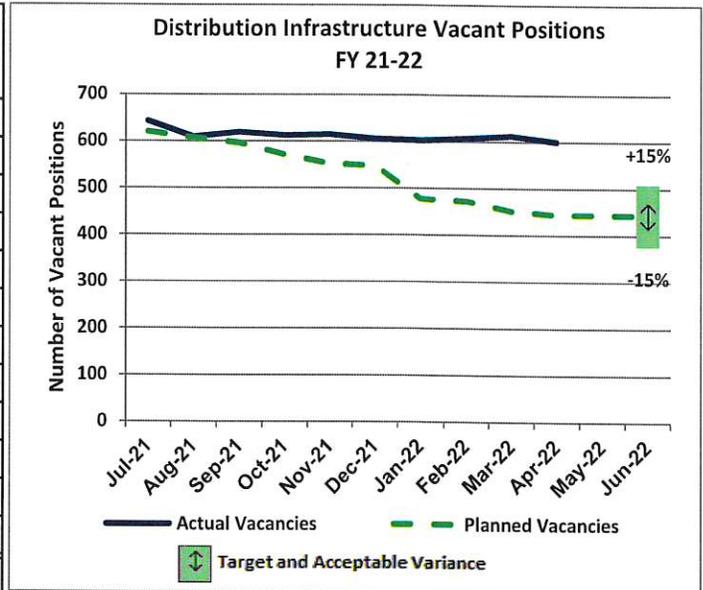
REPORTING PERIOD: April 2022

DEFINITION OF RATES METRIC: Number of Full Time Equivalents (FTEs) hired and dedicated to Power Distribution field positions as compared to plan.

TARGET & ACCEPTABLE VARIANCE (FY 21/22): Vacant budgeted Power Distribution Infrastructure field positions at 443 or less by the end of the fiscal year, ±15%

STATUS: **Outside Acceptable Variance**

FYTD as of:	Planned Vacancies	Actual Vacancies	Variance		Re-Estimate (If Applicable)
			# Vacancies	%	
Jul-21	620	643	23	3.7%	
Aug-21	607	609	2	0.3%	
Sep-21	596	619	23	3.9%	
Oct-21	571	612	41	7.2%	
Nov-21	552	614	62	11.2%	
Dec-21	547	605	58	10.6%	
Jan-22	477	602	125	26.2%	
Feb-22	472	606	134	28.4%	
Mar-22	451	612	161	35.7%	
Apr-22	444	600	156	35.1%	
May-22	444				
Jun-22	443				
Acceptable Variance			± 15%		



SOURCE OF DATA: Hiring Plan/Annual Personnel Resolution (KPI # 08.05.01.01)

1. BACKGROUND / PURPOSE

- Power Distribution Infrastructure Field positions are necessary to meet Power System Reliability and other infrastructure goals.
- Currently, Power Distribution Infrastructure Field positions are assigned to various divisions, including Power Supply Operations (PSO), Power Transmission & Distribution (PTD), and Power Construction & Maintenance (PCM).
- The target is to reduce vacant budgeted Power Distribution Infrastructure Field positions to 443 or less by the end of the fiscal year.

2. ACHIEVEMENTS/MILESTONES MET

- During the month of April, there was a total of 600 vacancies, which was 156 or 35.1% over planned vacancies.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- The current rate of hiring budgeted positions is outside the acceptable variance.
- The vacancy overrun is due to the following:
 - Majority of vacancies are currently being held for employees on emergency appointments, special assignments (LOA's), successful completion of probation, temporary (temp) assignments (Temp 1-5 and Article 33), and trainees on substitute positions.
 - Electrical Mechanic (EM)/Senior EM and Electrical Test Technician (ETT) require completion of a LADWP training program in order to be a qualified candidate. This inhibits our ability to promptly fill these positions.
 - Hiring delays and attrition in Electric Distribution Mechanic (EDM) and Electrical Craft Helper (ECH) positions. Of the interviews scheduled in March, only a fraction of the planned ECH-B positions were filled. Additional recruitment

efforts need to occur once more in the next few months.

4. MITIGATION PLAN AND/OR RECOMMENDATIONS

- PSO, PTD and PCM will continue to fill all vacant Power Distribution Infrastructure Field positions.

LADWP RATES METRIC – Total Renewable Portfolio Standard (Power)

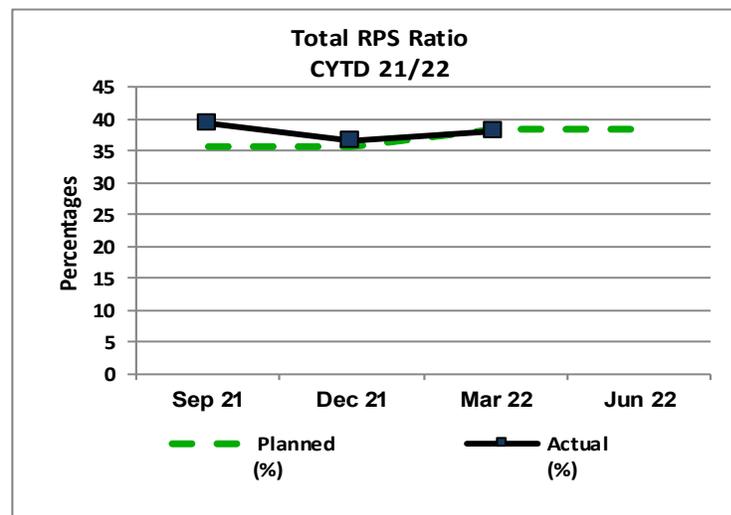
RESPONSIBLE MANAGER: Steven Pruett, Power External Energy Resources  **REPORTING PERIOD:** April 2022

DEFINITION OF RATES METRIC: GWH from RPS Resource/GWH of Retail Sales (State Requirement), In Percentages (%)

TARGET & ACCEPTABLE VARIANCE (FY 21/22): Target = 35.75% for calendar year 2021 and 38.50% for calendar year 2022; Acceptable Variance = $\pm 3\%$

STATUS: Within Acceptable Variance

CYTD as of:	Planned (%)	Actual (%)	Variance	Re-Estimate (If Applicable)
			%	
Sep 21	35.75	39.3	3.6%	
Dec 21	35.75	36.6	0.9%	
Mar 22	38.50	38.1	-0.4%	
Jun 22	38.50			
Acceptable Variance			$\pm 3\%$	



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 50% Renewable Portfolio Standard (RPS) ratio requirement in 2030, as required by the California Energy Commission (CEC).
- RPS portfolio includes Wind, Solar, Geothermal, Biomass, and Small Hydro.
- To comply with the CEC, RPS percentages are calculated over four calendar-years (2021-2024), not fiscal year or fiscal year-to-date basis. The compliance period quantifies the RPS-eligibility of a publicly owned utility.
- There are other RPS-related Rates Metric Reports for Wind, Solar, and Geothermal.

2. ACHIEVEMENTS / MILESTONES MET

- The Power Content Label for 2020 completed the annual internal audit which confirmed the value of 36.7% renewable energy for the year.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- Actuals for the fourth quarter of FY 21/22 will be available in August 2022.

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 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 above-mentioned risk factors.
- Excess Renewable Energy Credits (RECs) from one compliance period can be rolled over into the next compliance period.

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

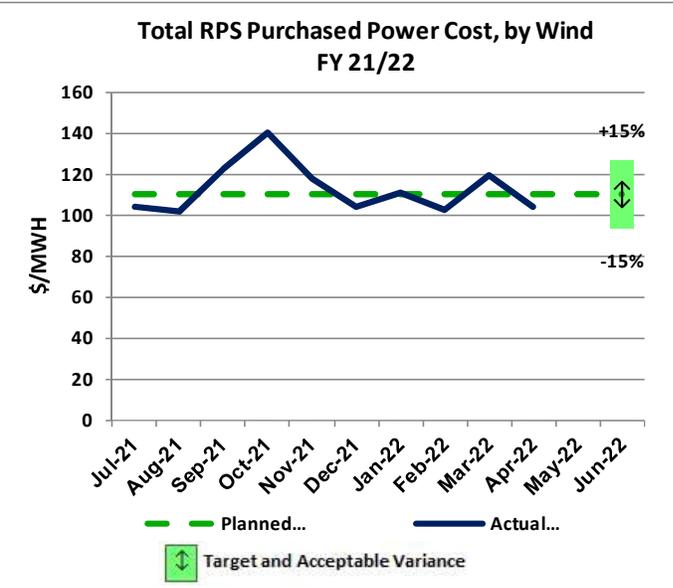
RESPONSIBLE MANAGER: Marlon Santa Cruz, PEER External Energy Resources **REPORTING PERIOD:** April 2022

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 21/22): Target = \$110.08/MWH; Acceptable Variance = ± 15%

STATUS: Within Acceptable Variance

FYTD as of:	Planned (\$/MWH)	Actual (\$/MWH)	Variance		Re-Estimate
			\$	%	
Jul-21	110.08	103.62	-6.46	-5.9%	
Aug-21	110.08	101.61	-8.47	-7.7%	
Sep-21	110.08	122.76	12.68	11.5%	
Oct-21	110.08	140.43	30.35	27.6%	
Nov-21	110.08	118.00	7.92	7.2%	
Dec-21	110.08	103.86	-6.22	-5.7%	
Jan-22	110.08	110.89	0.81	0.7%	
Feb-22	110.08	102.06	-8.02	-7.3%	
Mar-22	110.08	119.36	9.28	8.4%	
Apr-22	110.08	104.16	-5.92	-5.4%	
May-22	110.08				
Jun-22	110.08				
Acceptable Variance			± 15%		



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 "bus-bar", 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 28% of the Calendar Year 2021 RPS portfolio.

2. ACHIEVEMENTS / MILESTONES MET

- No updates.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- Actual is within acceptable variance.
- The Pacific DC Intertie was down for part of October which led to an increase in curtailments for the month of October. The contracts were charged for the total energy output (delivered + curtailment) even though only a portion was delivered thus increasing the \$/MWH actual.
- December actual includes test energy delivered by the Red Cloud Wind project.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

- No recommendations at this time.

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

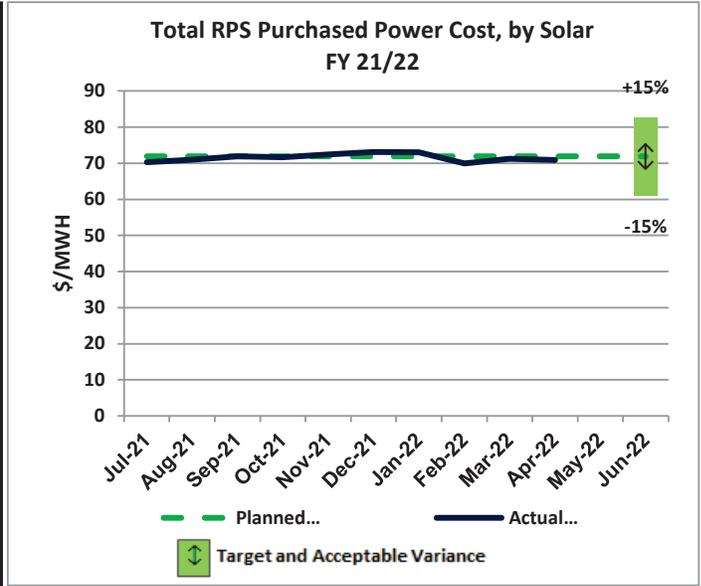
RESPONSIBLE MANAGER: Marlon Santa Cruz, PEER External Energy Resources **REPORTING PERIOD:** April 2022

DEFINITION OF RATES METRIC: Total RPS Solar Purchased Power Cost (\$/MWH) as Compared To Plan

TARGET & ACCEPTABLE VARIANCE (FY 21/22): Target = \$71.93/MWH; Acceptable Variance = ± 15%

STATUS: Within Acceptable Variance

FYTD as of:	Planned (\$/MWH)	Actual (\$/MWH)	Variance		Re-Estimate
			\$	%	
Jul-21	71.93	70.32	-1.61	-2.2%	
Aug-21	71.93	71.01	-0.92	-1.3%	
Sep-21	71.93	71.91	-0.02	0.0%	
Oct-21	71.93	71.66	-0.27	-0.4%	
Nov-21	71.93	72.43	0.5	0.7%	
Dec-21	71.93	73.13	1.20	1.7%	
Jan-22	71.93	73.04	1.11	1.5%	
Feb-22	71.93	69.93	-2.00	-2.8%	
Mar-22	71.93	71.24	-0.69	-1.0%	
Apr-22	71.93	70.92	-1.01	-1.4%	
May-22	71.93				
Jun-22	71.93				
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 “bus-bar”, 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 and weighted by actual generation.
- Solar energy supports meeting Renewable Portfolio Standard (RPS) goals. Solar energy is currently estimated to represent 38% of the Calendar Year 2021 RPS portfolio.

2. ACHIEVEMENTS / MILESTONES MET

- No updates.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- Actual is within acceptable variance.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

- No recommendations at this time.

RP

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

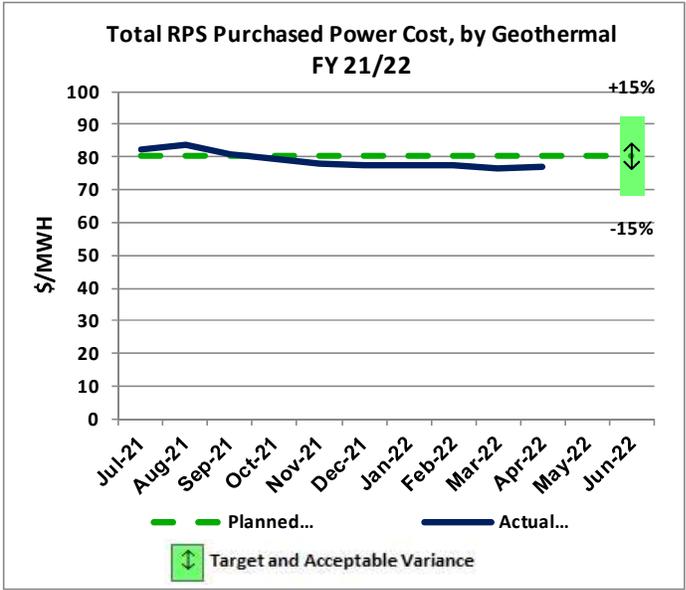
RESPONSIBLE MANAGER: Marlon Santa Cruz, PEER External Energy Resources **REPORTING PERIOD:** April 2022

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 21/22): Target = \$80.28/MWH; Acceptable Variance = ± 15%

STATUS: Within Acceptable Variance

FYTD as of:	Planned (\$/MWH)	Actual (\$/MWH)	Variance		Re-Estimate
			\$	%	
Jul-21	80.28	82.21	1.93	2.4%	
Aug-21	80.28	83.49	3.21	4.0%	
Sep-21	80.28	80.80	0.52	0.6%	
Oct-21	80.28	79.53	-0.75	-0.9%	
Nov-21	80.28	78.01	-2.27	-2.8%	
Dec-21	80.28	77.70	-2.58	-3.2%	
Jan-22	80.28	77.57	-2.71	-3.4%	
Feb-22	80.28	77.46	-2.82	-3.5%	
Mar-22	80.28	76.43	-3.85	-4.8%	
Apr-22	80.28	77.23	-3.05	-3.8%	
May-22	80.28				
Jun-22	80.28				
Acceptable Variance			± 15%		



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 "bus-bar", 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 27% of the Calendar Year 2021 RPS portfolio.

2. ACHIEVEMENTS / MILESTONES MET

- No updates.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- Actual is within acceptable variance.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

- No recommendations at this time.

LADWP RATES METRIC – Last Signed PPA (\$/MWH) by Technology, Wind (Power)

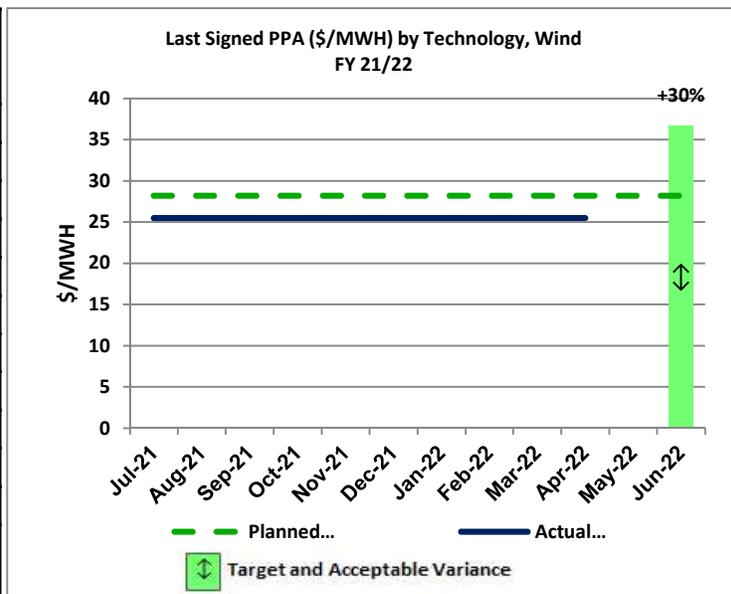
RESPONSIBLE MANAGER: Marlon Santa Cruz, PEER External Energy Resources **REPORTING PERIOD:** April 2022

DEFINITION OF RATES METRIC: Last Signed PPA (\$/MWH) by Technology, Wind

TARGET & ACCEPTABLE VARIANCE (FY 21/22): Target = \$28.20/MWH; Acceptable Variance = + 30%

STATUS: Within Acceptable Variance

FYTD as of:	Planned (\$/MWH)	Actual (\$/MWH)	Variance		Re-Estimate
			\$	%	
Jul-21	28.20	25.50	-2.70	-9.6%	
Aug-21	28.20	25.50	-2.70	-9.6%	
Sep-21	28.20	25.50	-2.70	-9.6%	
Oct-21	28.20	25.50	-2.70	-9.6%	
Nov-21	28.20	25.50	-2.70	-9.6%	
Dec-21	28.20	25.50	-2.70	-9.6%	
Jan-22	28.20	25.50	-2.70	-9.6%	
Feb-22	28.20	25.50	-2.70	-9.6%	
Mar-22	28.20	25.50	-2.70	-9.6%	
Apr-22	28.20	25.50	-2.70	-9.6%	
May-22	28.20				
Jun-22	28.20				
Acceptable Variance			+ 30%		



SOURCE OF DATA: Executed Power Purchase Agreement (KPI # 01.03.01.22)

1. BACKGROUND / PURPOSE

- PPA = Power Purchase Agreement. The \$43.00 energy cost is accounted for at the Navajo 500kV switchyard, in dollars per mega-watt-hour (\$/MWh).
- The target is based on CPUC's 2020 Padilla Report, which reflects current trends and does not include transmission costs.

2. ACHIEVEMENTS / MILESTONES MET

- Red Cloud Wind PPA was executed on 11/02/2020.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- Actual is within acceptable variance.
- The reported value of \$25.50 is a final calculated contract cost after removing an estimated transmission cost amount of \$17.50.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

- No recommendations at this time.

LADWP RATES METRIC – Last Signed PPA (\$/MWH) by Technology, Solar (Power)

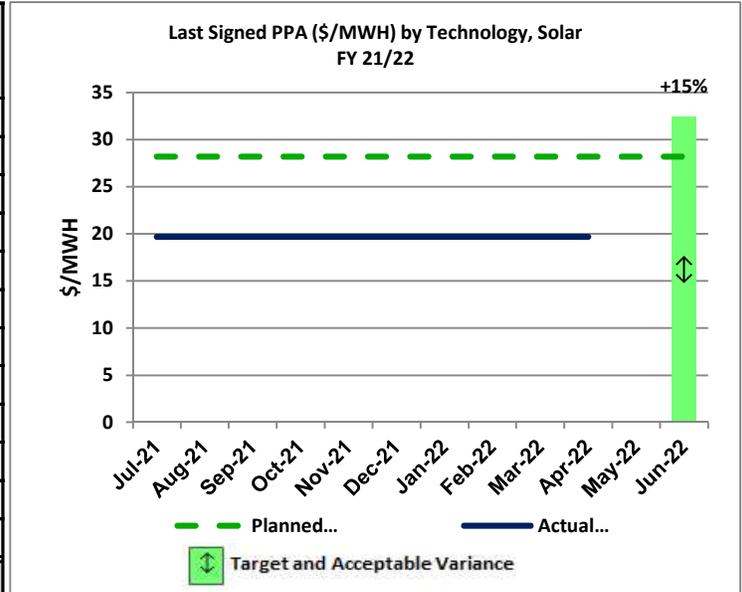
RESPONSIBLE MANAGER: Marlon Santa Cruz, PEER External Energy Resources **REPORTING PERIOD:** April 2022

DEFINITION OF RATES METRIC: Last Signed PPA (\$/MWH) by Technology, Solar

TARGET & ACCEPTABLE VARIANCE (FY 21/22): Target = \$28.20/MWH; Acceptable Variance = + 15%

STATUS: Within Acceptable Variance

FYTD as of:	Planned (\$/MWH)	Actual (\$/MWH)	Variance		Re-Estimate
			\$	%	
Jul-21	28.20	19.67	-8.53	-30.2%	
Aug-21	28.20	19.67	-8.53	-30.2%	
Sep-21	28.20	19.67	-8.53	-30.2%	
Oct-21	28.20	19.67	-8.53	-30.2%	
Nov-21	28.20	19.67	-8.53	-30.2%	
Dec-21	28.20	19.67	-8.53	-30.2%	
Jan-22	28.20	19.67	-8.53	-30.2%	
Feb-22	28.20	19.67	-8.53	-30.2%	
Mar-22	28.20	19.67	-8.53	-30.2%	
Apr-22	28.20	19.67	-8.53	-30.2%	
May-22	28.20				
Jun-22	28.20				
Acceptable Variance			+ 15%		



SOURCE OF DATA: Executed Power Purchase Agreement (KPI # 01.03.01.23)

1. BACKGROUND / PURPOSE

- PPA = Power Purchase Agreement. The \$39.62 energy cost is accounted for at the plant's "bus-bar", in dollars per mega-watt-hour (\$/MWH).
- The target is based on CPUC's 2020 Padilla Report, which reflects current trends and does not include the cost of the energy storage adder.

2. ACHIEVEMENTS / MILESTONES MET

- The last signed solar PPA included battery storage.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- Actual is within acceptable variance.
- Per Exhibit V of the PPA, the energy storage cost adder is \$19.95, resulting in the above reported value of \$19.67.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

- No recommendations at this time.

RP

LADWP RATES METRIC – Last Signed PPA (\$/MWH) by Technology, Geothermal (Power)

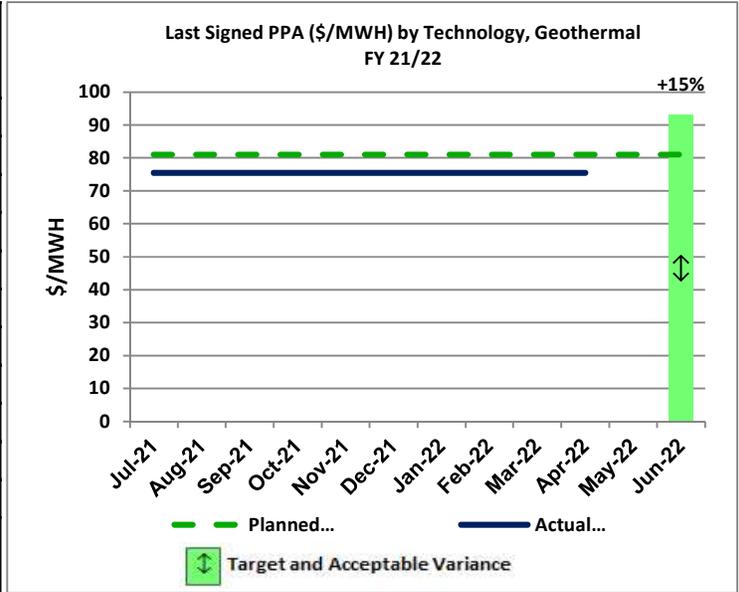
RESPONSIBLE MANAGER: Marlon Santa Cruz, PEER External Energy Resources **REPORTING PERIOD:** April 2022

DEFINITION OF RATES METRIC: Last Signed PPA (\$/MWH) by Technology, Geothermal

TARGET & ACCEPTABLE VARIANCE (FY 21/22): Target = \$81.00/MWH; Acceptable Variance = + 15%

STATUS: Within Acceptable Variance

FYTD as of:	Planned (\$/MWH)	Actual (\$/MWH)	Variance		Re-Estimate
			\$	%	
Jul-21	81.00	75.50	-5.50	-6.8%	
Aug-21	81.00	75.50	-5.50	-6.8%	
Sep-21	81.00	75.50	-5.50	-6.8%	
Oct-21	81.00	75.50	-5.50	-6.8%	
Nov-21	81.00	75.50	-5.50	-6.8%	
Dec-21	81.00	75.50	-5.50	-6.8%	
Jan-22	81.00	75.50	-5.50	-6.8%	
Feb-22	81.00	75.50	-5.50	-6.8%	
Mar-22	81.00	75.50	-5.50	-6.8%	
Apr-22	81.00	75.50	-5.50	-6.8%	
May-22	81.00				
Jun-22	81.00				
Acceptable Variance			+ 15%		



SOURCE OF DATA: Executed Power Purchase Agreement (KPI # 01.03.01.24)

1. BACKGROUND / PURPOSE

- PPA = Power Purchase Agreement. The energy cost is calculated at plant’s “bus-bar”, in dollars per mega-watt-hour (\$/MWH), per executed PPA.
- The last signed geothermal PPA was executed in June 2017 for \$75.50/MWH. The target is based on CPUC’s 2020 Padilla Report, which reflects current trends.

2. ACHIEVEMENTS / MILESTONES MET

- No updates.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- Actual is within acceptable variance.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

- No recommendations at this time.

RP

LADWP RATES METRIC – Power System Reliability Program

Generation, Capital (Power)



RESPONSIBLE MANAGER: Robert Fick, Power Supply Operations

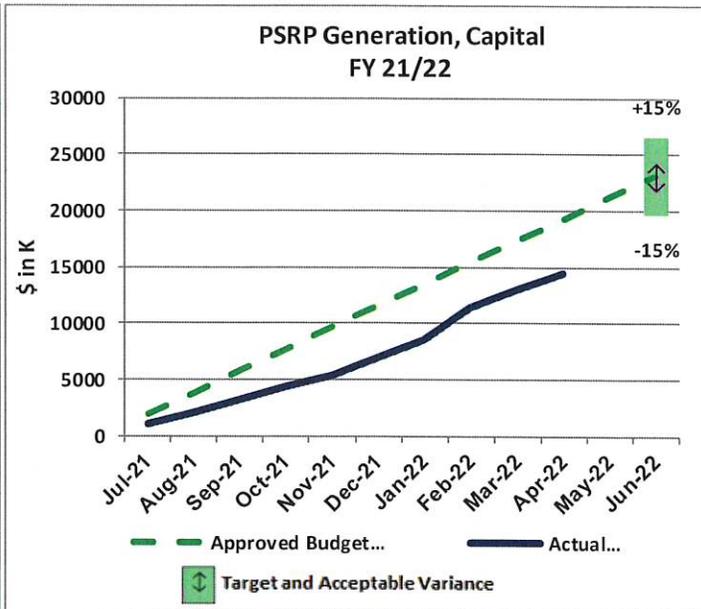
REPORTING PERIOD: April 2022

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

TARGET & ACCEPTABLE VARIANCE (FY 21/22): Target = \$23,106K; Acceptable Variance = ± 15%

STATUS: Outside Acceptable Variance

FYTD as of:	Approved Budget (\$ in K)	Actual (\$ in K)	Variance		Re-Estimate (If Applicable)
			\$ in K	%	
Jul-21	1,925.0	1,020.0	-905.0	-47.0%	
Aug-21	3,850.5	2,061.0	-1,789.5	-46.5%	
Sep-21	5,776.1	3,244.0	-2,532.1	-43.8%	
Oct-21	7,701.6	4,303.0	-3,398.6	-44.1%	
Nov-21	9,627.2	5,408.0	-4,219.2	-43.8%	
Dec-21	11,552.7	7,019.0	-4,533.7	-39.2%	
Jan-22	13,478.3	8,473.0	-5,005.3	-37.1%	
Feb-22	15,403.8	11,486.0	-3,917.8	-25.4%	
Mar-22	17,329.4	13,064.0	-4,265.4	-24.6%	
Apr-22	19,254.9	14,433.0	-4,821.9	-25.0%	
May-22	21,180.5				
Jun-22	23,106.0				
Acceptable Variance			± 15%		



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

- In July, Castaic Power Plant (CPP) crew performed major welding work to repair the secondary support for the Headcover and completed 90% of the required electrical testing on the stator.
- In August, CPP crew performed Major Overhaul on Unit 5. Crew repaired the Turbine Shaft Sleeve; moved the Headcover to the ceiling; removed wicket gates; performed electrical testing on the Stator; cleansed and inspected the Stator; cleansed and inspected the Lower Bracket; and scraped lower guide pump seals.
- In September, CPP crew continued working on Major Overhaul on Unit 5, which

included completing repair of the Turbine Shaft Sleeve; moving the Headcover to the ceiling; completed removal of the wicket gates and started weld repairing the gates. Crew also performed electrical testing on the Stator, cleaned and inspected the Stator, cleaned and inspected the Lower Bracket, scraped lower guide pump seals, and performed quality assurance measurements on the stator Belleville washers.

- In October 2021, CPP crew began the disassembly and quality assurance measurements of the wicket gate servomotors; completed inspection and nondestructive examination testing on the Rotor; and began weld repairs on the lower bracket thrust tub gussets.
- In November, CPP crews continued to work on the Major Overhaul on Unit 5, which included repair of cavitation damage on the wicket gates, continued the disassembly and quality assurance measurements of the wicket gate servomotors. Crews also worked on the electrical testing on the Stator and completed quality assurance

Within Acceptable Variance
Outside Acceptable Variance
Exceeds Target
Needs Attention

measurements on the stator Belleville washers.

- In December, CPP crews put a new Station Service transformer in place. Inspection was performed on Units 6, 3 and 4. In addition, stator core testing on Unit 6 was performed. Repairs to two generator coolers was completed.
- In January, CPP crews continued to work on the Major Overhaul on Unit 5. Stator winding bars were crated; weld repair of the wicket gates was completed; the Turbine Guide Oil Tub bottom was repaired; the Tyton Seal Base Ring was media blasted; verification plan was developed for fabricating new generator cooler plates.
- In February, CPP crews continued to work on the Major Overhaul on Unit 5; completed machining of new turbine studs; and completed replacement and fitment of the new Wicket Gate Seal Strips; two generator air coolers were overhauled and pressure tested; began removing distributor plates and bolts for repair of damaged threaded holes.
- In March, CPP crews continued to work on the Major Overhaul on Unit 5 with continuing repair of damaged threaded holes for the distributor plates. In addition, crews were redirected to Unit 1 for forced outage repair on the Stator due to damage caused by a leaking generator cooler.
- In April, CPP reached a milestone as the Rotor was successfully removed from Unit 1 as part of the work to repair the Stator during the current forced outage. Repairs are on schedule with anticipated return to service on Unit 1 in July 2022. Completing this work is important for the long-term reliable operation of the hydro-electric generator.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- Scheduled Inspection & Repair (SIR) of Harbor Generating Station Units 1, 2, and 5 began October 2021. Unit 5 outage was completed in February 2022. Unit 2 will finish in July 2022. Cost for Materials and Electrical Repair Services should increase by end of calendar year. Once Unit 2 SIR is complete, actuals should align with fiscal year budget.
- Cranes at Aqueduct Power Plant are out of order and staff are not able to perform the inspections and overhauls; hence causing the underrun.

Total Project Approved From Inception to FY29/30	\$339.3M
Total Project Estimates	\$290.5M
Projects Approved to Date	\$199.1M
Project Actuals to Date	\$112.6M

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

- Division continues to coordinate with Mechanical Repair Services for CPP Unit Overhaul work.

LADWP RATES METRIC – PSRP Transmission, Capital (Power)

RESPONSIBLE MANAGER: Pjoy Chua, Power Transmission Planning, Regulatory, & Innovation Division

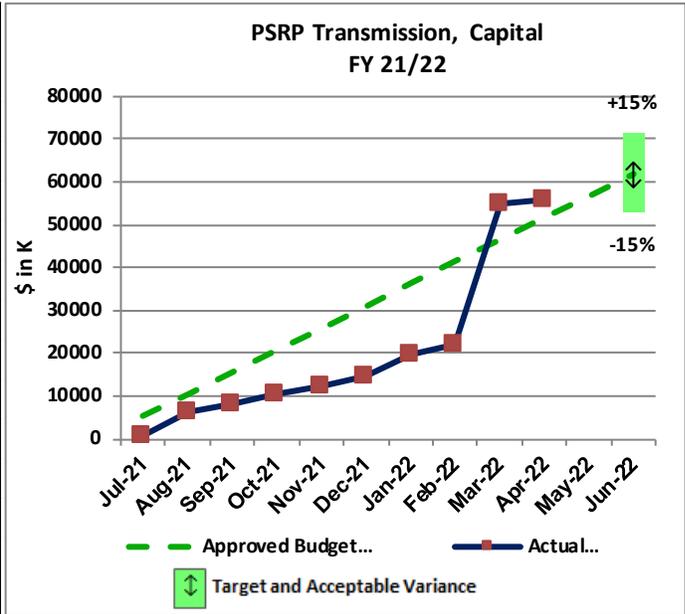
REPORTING PERIOD: April 2022

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

TARGET & ACCEPTABLE VARIANCE (FY 21/22): Target = \$62,003K; Acceptable Variance = ± 15%

STATUS: Within Acceptable Variance

FYTD as of:	Approved Budget (\$ in K)	Actual (\$ in K)	Variance		Re-Estimate
			\$ in K	%	
Jul-21	5,167.0	827.0	(4,340.0)	-84.0%	
Aug-21	10,333.8	6,197.0	(4,136.8)	-40.0%	
Sep-21	15,500.7	7,922.0	(7,578.7)	-48.9%	
Oct-21	20,667.6	10,355.0	(10,312.6)	-49.9%	
Nov-21	25,834.5	12,470.0	(13,364.5)	-51.7%	
Dec-21	31,001.5	14,714.0	(16,287.5)	-52.5%	
Jan-22	36,168.4	19,823.0	(16,345.4)	-45.2%	
Feb-22	41,335.3	22,077.0	(19,258.3)	-46.6%	
Mar-22	46,502.2	54,985.0	8,482.8	18.2%	
Apr-22	51,669.1	55,891.0	4,221.9	8.2%	
May-22	56,836.0				28,000.0
Jun-22	62,003.0				31,476.0
Acceptable Variance			± 15%		-49.2%



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

1. BACKGROUND / PURPOSE

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

practice. To complete the scope of the work under this job, \$130.5M needs to be allocated to O1406.

- The FI re-estimate above does not include C1406/O1406.

2. ACHIEVEMENTS / MILESTONES

- As of the end of April, only 4 maintenance hole lid restraints remain to be installed, in furtherance of a PSRP goal.
- Annual improvements to the Pacific DC Intertie transmission line (mostly insulator replacements) took place from mid-October to early November.
- In November, removed the last remaining portions of the Sylmar Ground Return System Ocean Electrode.
- Valley-Rinaldi Lines 1 & 2, reconductored for higher power capacity, returned to service in January.

Total Project Approved from Inception to FY 29/30	\$1,777.1M
Projects Approved to Date	\$1,280.9M
Project Actuals to Date	\$1,091.1M

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

- Combine and re-budget Jobs C1406 and O1406, and obtain a fresh FY estimate from the Job Manager.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- Actual costs were above the approved budget by 8.2%, which is within the acceptable variance.
- Overrun is caused by Scattergood-Olympic Cable B (C1406/O1406). LADWP has paid about \$33M in March to the prime contractor. This job has been zeroed out due to pandemic for budgetary

Within Acceptable Variance Outside Acceptable Variance Exceeds Target Needs Attention

Pjoy Chua

LADWP RATES METRIC – PSRP Transmission, O&M (Power)

RESPONSIBLE MANAGER: Ruben Hauser, Power Transmission and Distribution

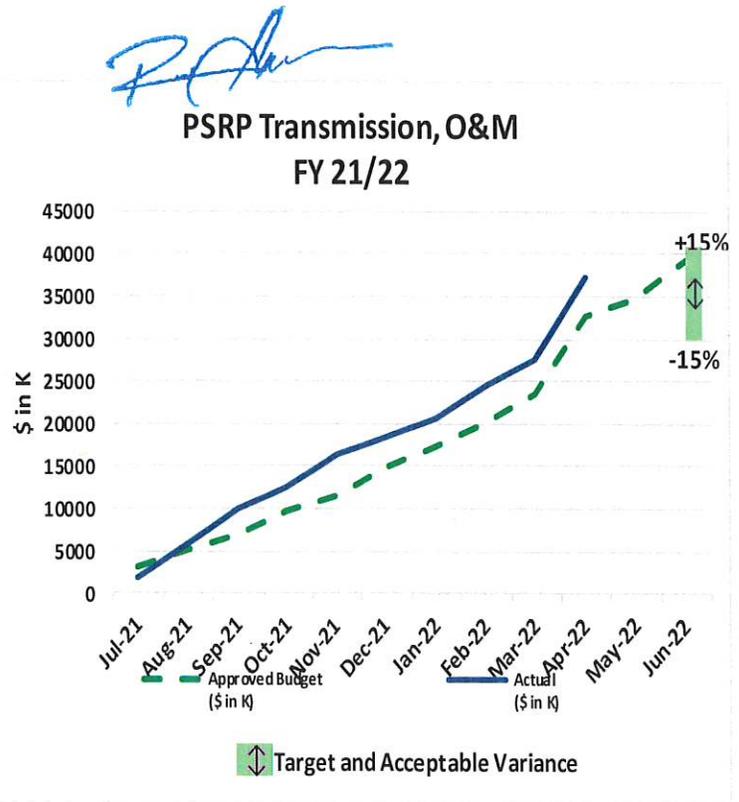
REPORTING PERIOD: April 2022

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

TARGET & ACCEPTABLE VARIANCE (FY 21/22): Target = \$39,169K; Acceptable Variance = ± 15%

STATUS: Within Acceptable Variance

FYTD as of:	Approved Budget (\$ in K)	Actual (\$ in K)	Variance		Re-Estimate (If Applicable)
			\$ in K	%	
Jul-21	3,264.1	1,877	-1387.1	-42.5%	
Aug-21	5,296.9	5,911	614.1	11.6%	
Sep-21	7,070.3	10,013	2942.7	41.6%	
Oct-21	9,757.4	12,493	2735.6	28.0%	
Nov-21	11,579.9	16,434	4854.1	42%	
Dec-21	14,750.6	18,460	3709.4	25%	
Jan-22	17,344.5	20,783	3438.5	20%	
Feb-22	20,234.3	24,442	4207.7	21%	
Mar-22	23,525.8	27,661	4135.2	18%	
Apr-22	32,639.0	37,343	4704.0	14%	
May-22	34,632.3				
Jun-22	39,169.0				
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.

Districts. In April 2022, clean up work in Job B1119 was scaled back due to less homeless activity.

2. ACHIEVEMENTS / MILESTONES MET

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

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- The KPI is within the 15% threshold set for its goal.
- Job B1119 (Miscellaneous O&M Costs for OH Transmission) continues to incur additional charges due to PTD's continual trash and homeless camp clean up on Transmission Right of Ways. PTD has had to respond to numerous complaints from Real Estate, Right of Way Engineering and the Council

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

- PTD management will monitor this FI and address any variations.

Within Acceptable Variance
 Outside Acceptable Variance
 Exceeds Target
 Needs Attention

LADWP RATES METRIC – PSRP Substation, Capital (Power)

RESPONSIBLE MANAGER: Sharat Batra

Sharat Batra

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REPORTING PERIOD: April 2022

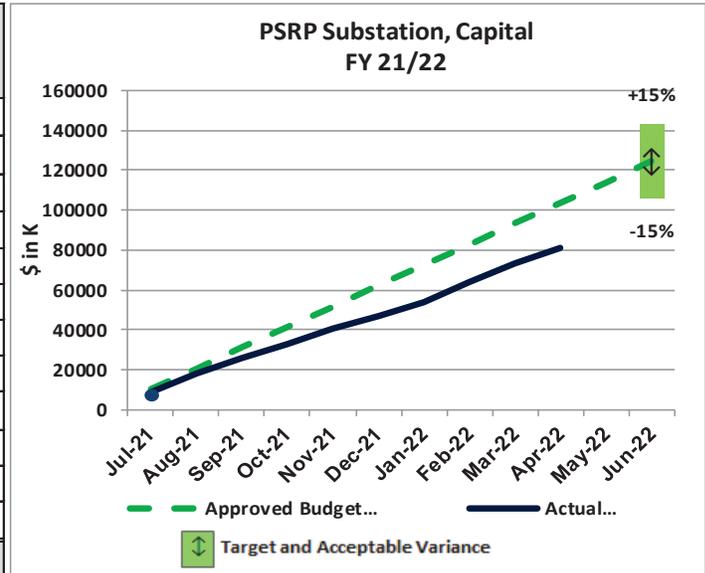
Power Engineering and Technical Services Division

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

TARGET & ACCEPTABLE VARIANCE (FY 21/22): Target = \$124,471.4K; Acceptable Variance = ± 15%

STATUS: **Outside Acceptable Variance**

FYTD as of:	Approved Budget (\$ in K)	Actual (\$ in K)	Variance		Re-Estimate (\$ in K)
			\$ in K	%	
Jul-21	10,372.6	8,980.0	-1,392.6	-13.4%	
Aug-21	20,745.2	18,469.0	-2,276.2	-11.0%	
Sep-21	31,117.9	25,936.0	-5,181.9	-16.7%	
Oct-21	41,490.5	32,961.0	-8,529.5	-20.6%	
Nov-21	51,863.1	40,425.0	-11,438.1	-22.1%	
Dec-21	62,235.7	46,939.0	-15,296.7	-24.6%	
Jan-22	72,608.3	54,070.0	-18,538.3	-25.5%	
Feb-22	82,980.9	64,315.0	-18,665.9	-22.5%	
Mar-22	93,353.6	73,181.0	-20,172.6	-21.6%	
Apr-22	103,726.2	81,115.0	-22,611.2	-21.8%	
May-22	114,098.8				
Jun-22	124,471.4				
Acceptable Variance			± 15%		



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

- Transformer, circuit breaker replacement, substation automation, feeders and trunklines, and battery systems progress are captured in the KPIs in the table below:

KPI	PSRP Replacements or Upgrades:	FYTD Actual	FYTD Target	FYE Target
TRANSFORMER REPLACEMENT:				
04.01.01.76	Extra High Voltage (high side >230kV – Receiving Station (RS), Switching Station (SS), High Voltage Direct Current Converter Stations)	0	1	2
04.01.01.81	High Voltage Transformers (high side 100kV to 230kV - RS, SS)	2	1	2
04.01.01.77	Medium Voltage Transformers (high side below 100kV – Distributing Station - DS)	7	15	21
CIRCUIT BREAKER REPLACEMENT:				
04.01.01.78	Transmission Circuit Breakers (>100kV - RS, SS, High Voltage Alternate Current Switchyards)	5	0	2
04.01.01.79	Sub-transmission Circuit Breakers (34.5kV - RS, DS)	11	15	18
04.01.01.80	Distribution Circuit Breakers (4.8kV - DS)	2	15	16
SUBSTATION AUTOMATED:				
04.01.03.01	Distributing or Receiving Station Upgrade/Automation	2	10	12
FEEDERS AND TRUNKLINES:				
04.01.01.82	34.5kV Line Positions (Reported Quarterly)	2	4	4
04.01.01.83	4.8kV Feeder Positions (Reported Quarterly)	4	18	20
BATTERY SYSTEMS:				
04.01.01.87	Substation Battery Systems (RS, DS)	3	5	6

Within Acceptable Variance



Outside Acceptable Variance



Exceeds Target



Needs Attention



Additional year-to-date achievements and milestones include:

- **Substation Equipment Life Extensions:** (87) 34.5 kV circuit breakers and (41) 4.8kV circuit breakers completed.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- This Functional Item (FI) is currently underspending due to a lack of Construction and Test Lab resources and competing capital jobs. It is critical that divisions such as Power Construction and Maintenance be able to hire additional Construction and Test Lab resources and backfill existing vacancies to increase the number of capital jobs that are able to be worked on. The estimated year-end projection is \$96.8M.
- Electrical Construction has implemented several efforts to hire more Electrical Construction workers, including implementing a shorter training program (currently 48 months), hiring exempt workers when feasible, and graduating up to 60 Electrical Mechanics per year. However, Electrical Construction still feeling the effects of hiring in 2020 due to COVID and multiple competing capital jobs, including out-of-basin Major Projects. An ongoing IHRP effort is set up to align the budget process with staffing needs.
- FI 211-95 includes Annual (perpetual) jobs, so single estimated lifetime expenditure does not apply.

Total Project Approved From Inception to FY29/30	\$2,997.9M
Project Approved to Date	\$1,792.4M
Project Actuals to Date	\$1,493.4M

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

- Conduct coordination meetings with various supporting divisions to align resources from the planning, design, procurement, construction, and commissioning phases of projects.
- Perform long-term planning to identify future resource needs to support the Substation Power System Reliability Program.
- Convene bi-monthly Power System Resiliency planning, design, construction, and commissioning meetings necessary to elevate the priority of substation reliability jobs.
- Continue to progress most other Substation Power System Reliability Program jobs as resources allow.

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

Jonathan Fonti

RESPONSIBLE MANAGER: Jonathan Fonti, Power Construction & Maintenance

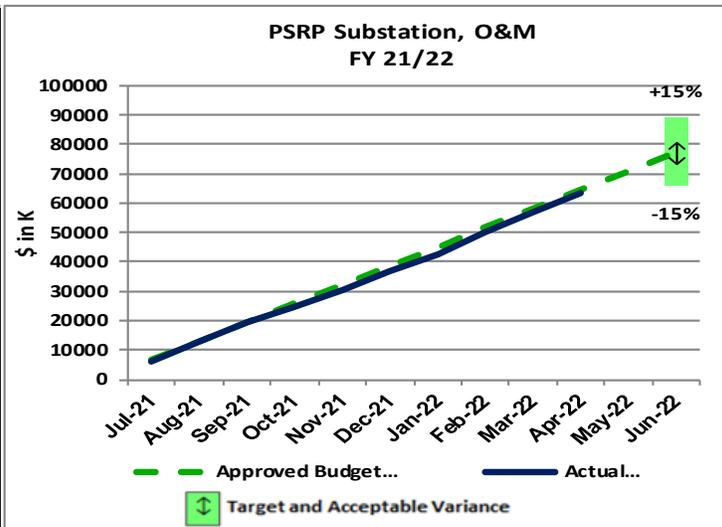
REPORTING PERIOD: April 2022

DEFINITION OF RATES METRIC: Budget Approved Annual Budget vs. Actual Expenditures for PSRP Substation, O&M

TARGET & ACCEPTABLE VARIANCE (FY 21/22): Target = \$77,428K; Acceptable Variance = ± 15%

STATUS: **Within Acceptable Variance**

FYTD as of:	Approved Budget (\$ in K)	Actual (\$ in K)	Variance		Re-Estimate
			\$ in K	%	
Jul-21	6,452	6,347	-105.3	-1.6%	
Aug-21	12,905	13,215	310.3	2.4%	
Sep-21	19,356	19,262	-94.0	-0.5%	
Oct-21	25,809	24,505	-1304.3	-5.1%	
Nov-21	32,262	30,198	-2063.7	-6.4%	
Dec-21	38,714	36,585	-2129.0	-5.5%	
Jan-22	45,166	42,867	-2299.3	-5.1%	
Feb-22	51,617	49,957	-1659.8	-3.2%	
Mar-22	58,071	57,073	-998.0	-1.7%	
Apr-22	64,521	63,254	-1267.0	-2.0%	
May-22	70,976				
Jun-22	77,428				
Acceptable Variance			± 15%		



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.
- Electrical Station Maintenance (ESM) serves as facility manager of over 5,000 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.

2. ACHIEVEMENTS/MILESTONES MET

- See attached Supplemental Summary for the monthly breakdown of restorations and work completed.

3. PERFORMANCE/VARIANCE ANALYSIS & YEAR END PROJECTION

- Overall underrun is mainly attributed to 45 Electrical Mechanic vacancies due to attrition, promotions, retirements and absences because of COVID-19 protocols. Due to limited labor resources (CE10), insufficient staff handle both ongoing Capital and O&M projects. In April, Capital projects include Receiving Station - A, 34.5kV Disconnect Modifications and battery system upgrades in addition to Circuit Breaker Life Extension Program, Customer Station transformer life extensions, and cable replacements.

4. MITIGATION PLAN AND/OR RECOMMENDATIONS

- Electrical Mechanics (EMs) and Electrical Testers that support this FI can only be hired after completing the corresponding training programs. ESM competes with other sections to hire EMs. In January 2022, ESM received 8 new EMs from the Training Center. In addition, ESM will always have Capital work and the percentage (%) of Capital work will fluctuate anywhere from 10% to 45% depending on the specific work load during a particular month, but the goal is to work around 25% Capital, which has remained the same each month.

ACHIEVEMENTS / MILESTONES MET

The following table details the monthly breakdown of Substation O&M activity since JULY 2021.

	JULY 2021	AUG 2021	SEPT 2021	OCT 2021	NOV 2021	DEC 2021	JAN 2022	FEB 2022	MAR 2022	APR 2022	MAY 2022	JUNE 2022	TOTAL
NO. OF RESTORATIONS OF CUSTOMER CIRCUITS:													
Receiving Stations (RS) Circuit Outages	50	40	40	46	35	51	30	24	25	47			388
Distributing Station (DS) Circuit Outages	94	98	98	117	71	108	82	78	105	82			933
5-kV Circuit Grounds	59	35	35	51	26	107	90	44	30	32			509
NO. OF INSULATOR WASHINGS:													
Generating Stations	0	0	0	0	0	0	0	0	0	0			0
Receiving Stations	5	4	3	3	5	4	3	3	4	6			40
Distributing Stations	11	12	14	12	3	11	15	12	10	6			106

*Achievements / Milestones met for the PSRP Substation O&M (Power) Rates Metric

LADWP RATES METRIC – PSRP Distribution, Capital (Power)

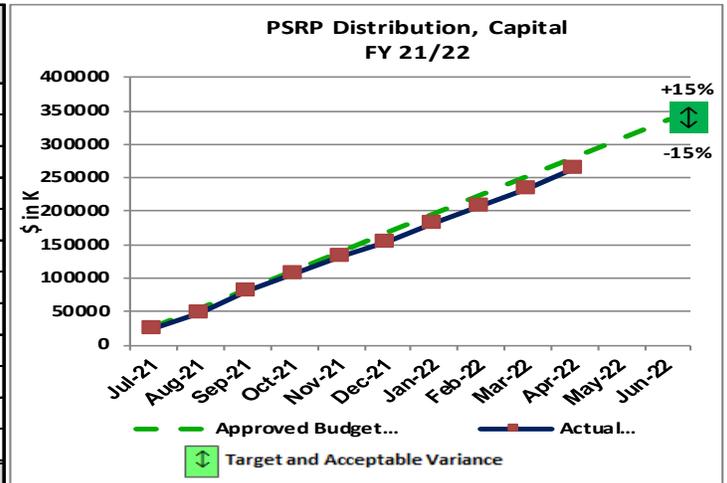
RESPONSIBLE MANAGER: Vincent Zabukovec *VZ*
Power Engineering and Technical Services Division

REPORTING PERIOD: April 2022

DEFINITION OF RATES METRIC: Board Approved Annual Budget vs. Actual Expenditures For PSRP Distribution, Capital
TARGET & ACCEPTABLE VARIANCE (FY 21/22): Target = \$337,745K; Acceptable Variance = ± 15%

STATUS: Within Acceptable Variance

FYTD as of:	Approved Budget (\$ in K)	Actual (\$ in K)	Variance		Re-Estimate
			\$ in K	%	
Jul-21	28,145.4	25,728.0	-2,417.4	-8.6%	
Aug-21	56,290.8	49,178.0	-7,112.8	-12.6%	
Sep-21	84,436.30	81,804.0	-2,632.3	-3.1%	
Oct-21	112,581.7	108,041.0	-4,540.7	-4.0%	
Nov-21	140,727.1	132,995.0	-7,732.1	-5.5%	
Dec-21	168,872.5	154,239.0	-14,633.5	-8.7%	
Jan-22	197,017.9	183,198.0	-13,819.9	-7.0%	
Feb-22	225,163.3	207,541.0	-17,622.3	-7.8%	
Mar-22	253,308.8	234,478.0	-18,830.8	-7.4%	
Apr-22	281,454.2	264,294.0	-17,160.2	-6.1%	
May-22	309,599.6				
Jun-22	337,745.0				
Acceptable Variance			± 15%		



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: 5% (Jobs P6309 & P6394)
 - Poles: 37% (Job P6322)
 - Crossarms: 14% (Job P6318)
 - Cables: 18% (Job P6306)

2. ACHIEVEMENTS / MILESTONES MET

- The Distribution Reliability spent 93.9% of the budget through the month of April to work on and complete the following:
 - New rack and bank installation RS-Rinaldi, RS-B and RS-M
 - 936 transformer installations
 - 3,127 pole replacements
 - 9,019 deteriorated crossarm replacements
 - 46.4 circuit-mile of cable replacements
 - 9,382 FIX-IT tickets (Jobs P6318, P6322, P6394, P6306, P6309 & O1357)
 - Work continued on Owens Valley – overhead/underground installations and removals, asbestos removals, trouble ticket repairs and service restorations due to outages.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- Variance through the month of April is \$17.1M, 6.1% under budget. Variance is due to limited construction resources. Also, this is due to District crews focusing resources on other priority work such as projects for Metropolitan Transportation Authority, Los Angeles World Airports, and Bureau of Engineering, as well as relocations, conversions and line extensions for new and existing customers. Variance has decreased from the previous month as District and Contract Operations crews continue work to meet key performance index (KPI) goals. The proposed year-end forecast will be within the acceptable variance range of +/-15% of the approved budget for FY 21/22.

Total Project Approved From Inception to FY29/30	\$6,622.0M
Projects Approved to Date	\$3,886.0M
Project Actuals to Date	\$3,419.1M

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

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

- Contract Operations crews will assist District crews in meeting key performance index (KPI) goals.

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

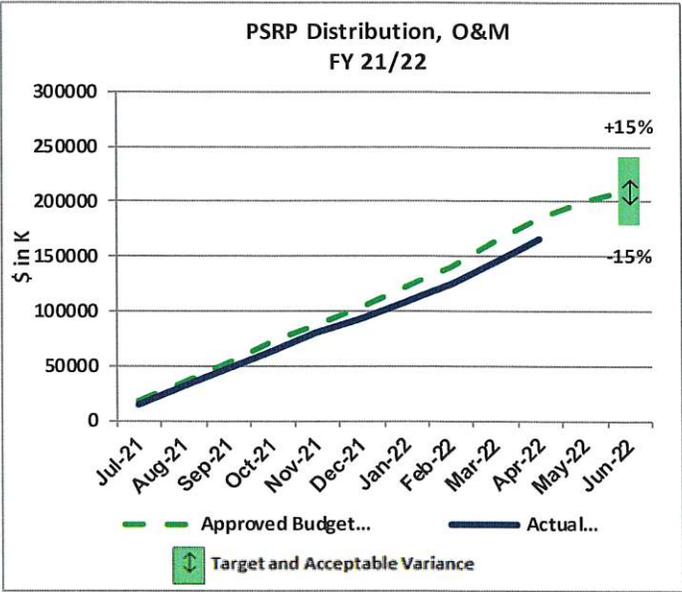
RESPONSIBLE MANAGER: Ruben Hauser, Power Transmission and Distribution **REPORTING PERIOD:** April 2022

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

TARGET & ACCEPTABLE VARIANCE (FY 21/22): Target = \$210,707K; Acceptable Variance = ± 15%

STATUS: Within Acceptable Variance

FYTD as of:	Approved Budget (\$ in K)	Actual (\$ in K)	Variance		Re-Estimate (If Applicable)
			\$ in K	%	
Jul-21	17,559	15,434	-2,124.9	-12.1%	
Aug-21	35,326	32,526	-2,800.4	-7.9%	
Sep-21	53,327	47,377	-5,949.6	-11.2%	
Oct-21	72,336	63,621	-8,714.6	-12.0%	
Nov-21	87,209	80,356	-6,853.2	-7.9%	
Dec-21	104,011	93,542	-10,468.7	-10.1%	
Jan-22	122,817	107,980	-14,836.8	-12.1%	
Feb-22	140,439	123,520	-16,918.5	-12.0%	
Mar-22	163,661	144,830	-18,830.9	-11.5%	
Apr-22	184,507	165,404	-19,103.4	-10.4%	
May-22	200,043				
Jun-22	210,707				
Acceptable Variance			± 15%		



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) aids in the hardening and replacement of critical infrastructure.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- This KPI is within its 15% threshold set for its goal.
- The underrun is due to pending contract work for Maintenance of the Underground Distribution System (Job P6340) and Power Transmission Distribution Vegetation Management Programs (Job P6341). Invoices will be processed by the fiscal year-end, which should lessen the underrun and bring us closer to the approved budgeted amount.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

- PTD management will monitor this FI and address any variations.

LADWP RATES/EQUITY METRIC – Transformer Replacement (Power)

RESPONSIBLE MANAGER: Ruben Hauser, Power Transmission and Distribution
EQUITY CORE CATEGORY: Water and Power Infrastructure Investment

REPORTING PERIOD: April 2022

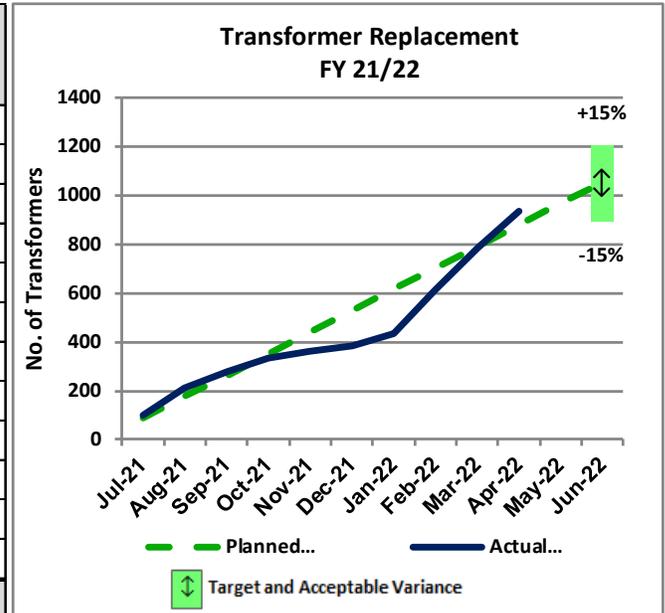
DEFINITION OF RATES METRIC: Number of Transformers Replaced Against Plan

TARGET & ACCEPTABLE VARIANCE (FY 21/22): Target = 1,050; Acceptable Variance = ± 15%

RH

STATUS: Within Acceptable Variance

FYTD as of:	Planned (No.)	Actual (No.)	Variance		Re-Estimate
			No.	%	
Jul-21	88	102	14	15.9%	
Aug-21	176	210	34	19.3%	
Sep-21	264	278	14	5.3%	
Oct-21	352	336	-16	-4.5%	
Nov-21	440	363	-77	-17.5%	
Dec-21	528	384	-144	-27.3%	
Jan-22	616	435	-181	-29.4%	
Feb-22	704	612	-92	-13.1%	
Mar-22	792	786	-6	-0.8%	
Apr-22	880	936	56	6.4%	
May-22	968				
Jun-22	1,050				
Acceptable Variance			± 15%		



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

1. BACKGROUND / PURPOSE

- Replace 1,050 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).
- The Transformer Replacement target of 1,050 reflects the planned transformer replacement for job P6394 (Identify and Replace Distribution Transformers and Related Equipment). Additionally, there is a planned replacement of 50 transformers under job P6309 (System Transformer Installation/Upgrades). The actual transformer replacements reflect the transformers replaced under both Job P6394 and Job P6309.

2. CRITERIA

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

hardening which has been identified and based on the urgency.

3. ACHIEVEMENTS / MILESTONES MET

- To date, the target was to replace 880 transformers and the current actual number of transformers replaced is 936.

4. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- The number of transformers replaced falls within the ±15% threshold.
- The late summer heat combined with the fall wind events play into the need for resources to be allocated as needed. Resources will be utilized as needed during storms, focusing on restoration and clean up.
- Transformers are replaced after failure, overload condition or regular scheduled maintenance as required.

5. MITIGATION PLAN AND / OR RECOMMENDATIONS

- PTD will continue to monitor the job as the year progresses and will adjust priorities and resources accordingly. PTD will continue to monitor transformer replacements throughout the FY.

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.

LADWP RATES/EQUITY METRIC – Pole Replacement (Power)

RESPONSIBLE MANAGER: Ruben Hauser, Power Transmission and Distribution

REPORTING PERIOD: April 2022

EQUITY CORE CATEGORY: Water and Power Infrastructure Investment

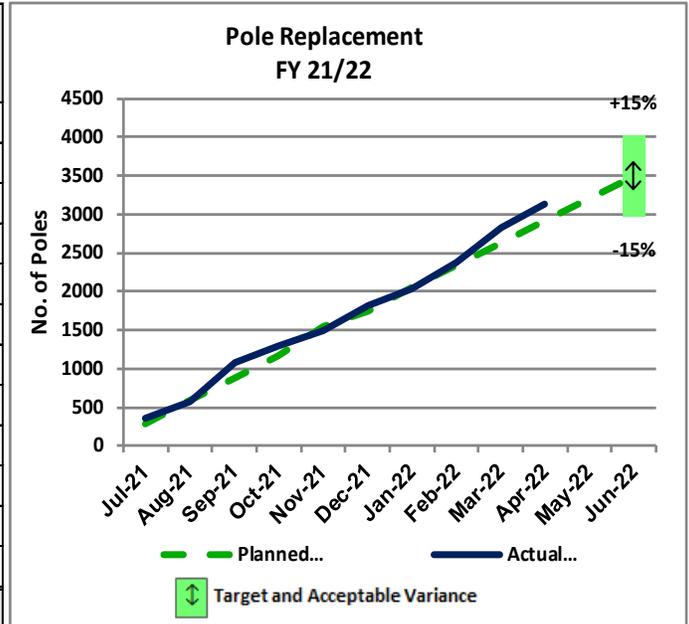
DEFINITION OF RATES METRIC: Number of Poles Replaced Against Plan

TARGET & ACCEPTABLE VARIANCE (FY 21/22): Target = 3,500; Acceptable Variance = ± 15%

RH

STATUS: Within Acceptable Variance

FYTD as of:	Planned (No.)	Actual (No.)	Variance		Re-Estimate
			No.	%	
Jul-21	292	365	73	25.0%	
Aug-21	583	565	-18	-3.1%	
Sep-21	876	1,075	199	22.7%	
Oct-21	1,168	1,288	120	10.3%	
Nov-21	1,549	1,485	-64	-4.1%	
Dec-21	1,752	1,809	57	3.3%	
Jan-22	2,043	2,029	-14	-0.7%	
Feb-22	2,335	2,370	35	1.5%	
Mar-22	2,628	2,818	190	7.2%	
Apr-22	2,919	3,127	208	7.1%	
May-22	3,212				
Jun-22	3,500				
Acceptable Variance			± 15%		



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 are prioritized for replacement by age and if they are deteriorated.
- The DC&M Inspection program tests and identifies poles that need replacement.
- Fire mitigation and wildfire hardening also play a role in pole replacement.

3. ACHIEVEMENTS / MILESTONES MET

- To date, the target was to replace 2,919 poles and the current actual number of poles replaced is 3,127.

4. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- The number of poles replaced falls within the ±15% threshold.
- Replacements will vary month to month due to some jobs taking over a month to complete.

5. MITIGATION PLAN AND / OR RECOMMENDATIONS

- PTD will evaluate the progress of the jobs and make necessary adjustments to assure goals are achieved.

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: Ruben Hauser, Power Transmission and Distribution

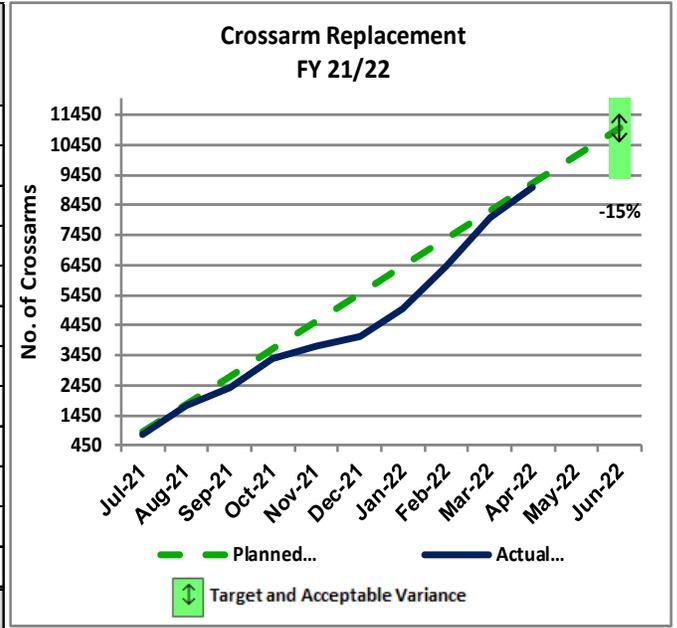
REPORTING PERIOD: April 2022

DEFINITION OF RATES METRIC: Number of Crossarms Replaced Against Plan

TARGET & ACCEPTABLE VARIANCE (FY 21/22): Target = 11,000; Acceptable Variance = ± 15%

STATUS: Within Acceptable Variance

FYTD as of:	Planned (No.)	Actual (No.)	Variance		Re-Estimate
			No.	%	
Jul-21	916	825	-91	-9.9%	
Aug-21	1,832	1,794	-38	-2.1%	
Sep-21	2,748	2,377	-371	-13.5%	
Oct-21	3,664	3,322	-342	-9.3%	
Nov-21	4,580	3,755	-825	-18.0%	
Dec-21	5,496	4,065	-1,431	-26.0%	
Jan-22	6,412	5,003	-1,409	-22.0%	
Feb-22	7,328	6,409	-919	-12.5%	
Mar-22	8,244	8,036	-208	-2.5%	
Apr-22	9,160	9,019	-141	-1.5%	
May-22	10,076				
Jun-22	11,000				
Acceptable Variance			± 15%		



SOURCE OF DATA: Jobs P6318 (KPI #04.01.01.21)

1. BACKGROUND / PURPOSE

- Replace 11,000 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 9,160 crossarms and the current actual number of crossarms replaced is 9,019. This includes wildfire hardening which has been identified and based on the urgency, includes replacement.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- The number of crossarms replaced falls within the ±15% threshold.
- PTD is constantly monitoring crossarm replacement activity and adjusting work and resources as needed. The downward trend began in August during the summer. The late summer heat combined with the fall wind events play into the need for resources to be allocated as needed.
- This decrease should not last beyond a few months as the Division’s focus changes with the weather and operating needs. PTD’s resources have been revamped to crossarm replacement in January, which shows an increase starting in February.
- During summer months, replacements usually decrease due to heat storms causing the majority of field crews to focus on replacing overload transformers.
- PTD was more accurate in capturing completed work using WMIS and as resources were prioritized in other areas. PTD will focus resources according to the operating needs of the distribution system and will work to meet the target goals for all our KPI’s.

Within Acceptable Variance Outside Acceptable Variance Exceeds Target Needs Attention

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

- PTD will monitor this job to ensure goals are met.

LADWP RATES/EQUITY METRIC – Cable Replacement (Power)

RESPONSIBLE MANAGER: Vincent Zabukovec *VZ*
Power Engineering and Technical Services Division

REPORTING PERIOD: April 2022

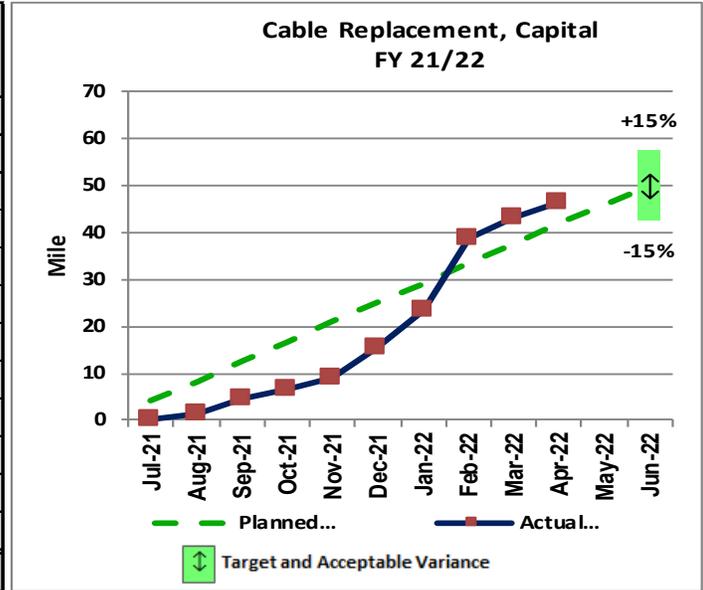
EQUITY CORE CATEGORY: Water & Power Infrastructure Investment

DEFINITION OF RATES METRIC: No. of Miles of Cable Replaced Against Plan

TARGET & ACCEPTABLE VARIANCE (FY 21/22): Target = 50 miles; Acceptable Variance = ±15%

STATUS: **Within Acceptable Variance**

FYTD as of:	Planned (Mile)	Actual (Mile)	Variance		Re-Estimate
			Mile	%	
Jul-21	4.2	0.3	-3.9	-92.9%	
Aug-21	8.4	1.6	-6.8	-81.0%	
Sep-21	12.6	4.5	-8.1	-64.3%	
Oct-21	16.8	6.5	-10.3	-61.3%	
Nov-21	21.0	9.1	-11.9	-56.7%	
Dec-21	25.0	15.5	-9.5	-38.0%	
Jan-22	29.2	23.4	-5.8	-19.9%	
Feb-22	33.4	38.6	5.2	15.6%	
Mar-22	37.6	43.1	5.5	14.6%	
Apr-22	41.8	46.4	4.6	11.0%	
May-22	46.0				49.4
Jun-22	50.0				53.6
Acceptable Variance			± 15%		7.2%



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

1. NARRATIVE / BACKGROUND

- Cable replacement of 4.8kV and 34.5kV 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 April, Distribution Construction & Maintenance completed 46.4 circuit-miles. The goal is to complete 50 circuit-miles for Fiscal Year 21/22.

4. PERFORMANCE/VARIANCE ANALYSIS & YEAR END PROJECTION

- Variance through the month of April is 4.6 circuit-miles, 11.0% above target. Variance is due to District and Contract Operations crews continuing to complete 4.8kV and 34.5kV cable replacement projects due to cable failures in the field and administratively closing completed jobs in the system. Expenditures for cable replacement have

incurred \$16.8M overrun in the corresponding budget in Job P6306. Overrun is caused by some cable replacement projects requiring the installation of new conduit and underground structures which incur increased material costs and labor hours. Additionally, crews work overtime during nights and weekends to repair cable failures in the field and reduce customer outage times.

5. MITIGATION/RECOMMENDATION

- Distribution circuit design engineers will compile lists of cable replacement jobs under construction, identify which jobs are completed or close to being completed and work with District crews to close the completed jobs.

6. OUTREACH STRATEGY / PLAN

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

LADWP RATES METRIC – Average Unit Cost per Transformer (Power)

RESPONSIBLE MANAGER: David Hanson, Power Transmission and Distribution

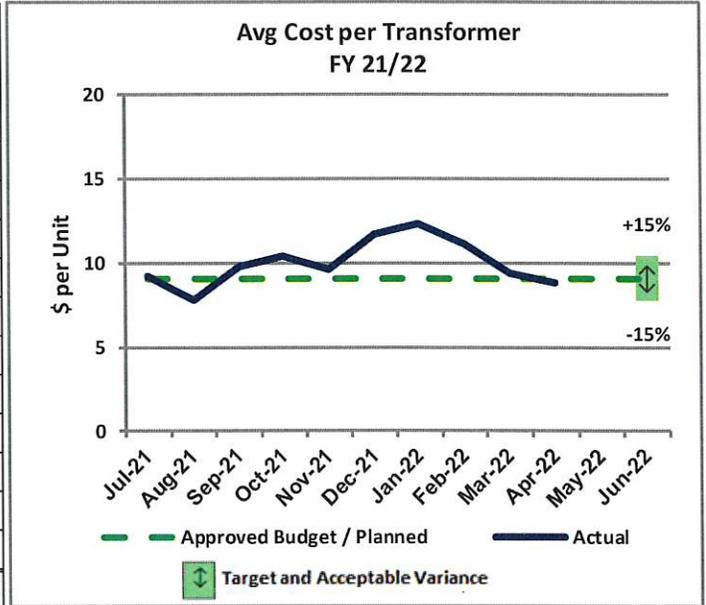
REPORTING PERIOD: April 2022

DEFINITION OF RATES METRIC: Average Unit Cost per Transformer

TARGET & ACCEPTABLE VARIANCE (FY 21/22 Target = \$9.1K per transformer: Acceptable Variance = ± 15%)

STATUS: Within Acceptable Variance

FYTD as of:	Approved Budget / Planned	Actual	Variance		Re-Estimate (If Applicable)
			Unit or \$	%	
Jul-21	9.1	9.2	0.1	1.1%	
Aug-21	9.1	7.8	(1.3)	-14.3%	
Sep-21	9.1	9.8	0.7	7.7%	
Oct-21	9.1	10.4	1.3	14.3%	
Nov-21	9.1	9.6	0.5	5.5%	
Dec-21	9.1	11.7	2.6	28.6%	
Jan-22	9.1	12.3	3.2	35.2%	
Feb-22	9.1	11.1	2.0	22.0%	
Mar-22	9.1	9.4	0.3	3.3%	
Apr-22	9.1	8.8	(0.3)	-3.3%	
May-22	9.1				
Jun-22	9.1				
Acceptable Variance			± 15%		



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

1. BACKGROUND / PURPOSE

- Identify and replace 1050 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) has a target replacement cost of \$9.1K per unit.

2. ACHIEVEMENTS / MILESTONES MET

- As of April 30, the target was to replace 880 transformers at 83% of the fiscal year-end goal. PTD has completed replacement of 936 transformers, which is 89.1% of the fiscal year goal with a current average cost of \$8.8K per unit.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- Transformers are identified for replacement using several different criteria; inspections, programs, power quality, as well as risk of failures. The transformers that are incident driven will fluctuate and will directly affect the cost per unit. Due to incident-driven replacements, PTD does not have complete control over the excess of units replaced. The

average unit cost per transformer is now within the acceptable variance due to closing the large number of outage incident jobs in February.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

- Power Transmission Planning, Regulatory, and Innovation (PTPRI) business group continues to make advancements on a strategic goal to improve Work Management Information System (WMIS) mapping of Accelerated Code (AC) jobs. Some improvements have been implemented. Methods of capturing costs in the appropriate jobs has been implemented and will require more training for new crew leaders and supervisors and continued monitoring and adjusting.
- PTD is working with PTPRI on refining the mapping of AC jobs and providing the most accurate cost per unit.
- PTD is monitoring and providing recommendations as needed.

Within Acceptable Variance
Outside Acceptable Variance
Exceeds Target
Needs Attention

LADWP RATES METRIC – Average Unit Cost per Pole (Power)

RESPONSIBLE MANAGER: David Hanson, Power Transmission and Distribution

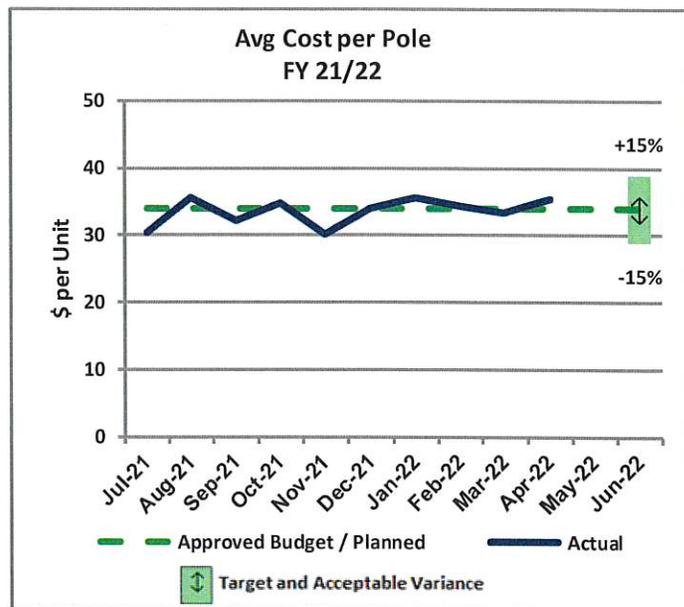
REPORTING PERIOD: April 2022

DEFINITION OF RATES METRIC: Average Unit Cost per Pole

TARGET & ACCEPTABLE VARIANCE (FY 21/22): Target = \$33.9K per pole: Acceptable Variance = ± 15%

STATUS: Within Acceptable Variance

FYTD as of:	Approved Budget / Planned	Actual	Variance		Re-Estimate (If Applicable)
			Unit or \$	%	
Jul-21	33.9	30.4	(3.5)	-10.3%	
Aug-21	33.9	35.6	1.7	5.0%	
Sep-21	33.9	32.1	(1.8)	-5.3%	
Oct-21	33.9	34.8	0.9	2.7%	
Nov-21	33.9	30.2	(3.7)	-10.9%	
Dec-21	33.9	34	0.1	0.3%	
Jan-22	33.9	35.5	1.6	4.7%	
Feb-22	33.9	34.4	0.5	1.5%	
Mar-22	33.9	33.4	(0.5)	-1.5%	
Apr-22	33.9	35.3	1.4	4.1%	
May-22	33.9				
Jun-22	33.9				
Acceptable Variance			± 15%		



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 \$33.9K per unit.

2. ACHIEVEMENTS / MILESTONES MET

- As of April 30, our current to date target was a replacement of 2,919 power poles at 83% of the fiscal year goal. PTD has completed replacement of 3,127 power poles, which is 89.3% of the fiscal year goal with a current average cost of \$35.3K per unit.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- PTD's Contract Operations personnel, which includes outside contractors, are within the acceptable variance for this month.

- Work Management Information System (WMIS) is the system used to capture time and work orders from employees working on the pole replacements. The number of crews and number of employees that make up each crew may vary based on the location, type of poles being replaced, specialized equipment utility, and other factors that the pole replacement job entails. The number of crews, the number of employees on each crew, and how time is entered by each employee affects WMIS reporting and consequently affects the average cost per unit average, which is 4.1% over the target replacement cost and within the acceptable variance on this Multi-Year Expenditure.
- The cost of the pole replacement and the number of crews needed to perform these jobs are affected by the following: complexity/ease of replacement, location and other mitigating factors, such as the introduction of alternative poles.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

- PTD will monitor and audit unit costs as we work with Power Transmission Planning, Regulatory,

Within Acceptable Variance

Outside Acceptable Variance

Exceeds Target

Needs Attention

and Innovation (PTPRI) to refine accounting for these jobs.

- PTD will work with WMIS administrators on refining and evaluating how pole replacement costs are captured and how the cost per unit is affected.

Within Acceptable Variance 

Outside Acceptable Variance 

Exceeds Target 

Needs Attention 

LADWP RATES METRIC – Average Unit Cost per Crossarm (Power)

RESPONSIBLE MANAGER: David Hanson, Power Transmission and Distribution

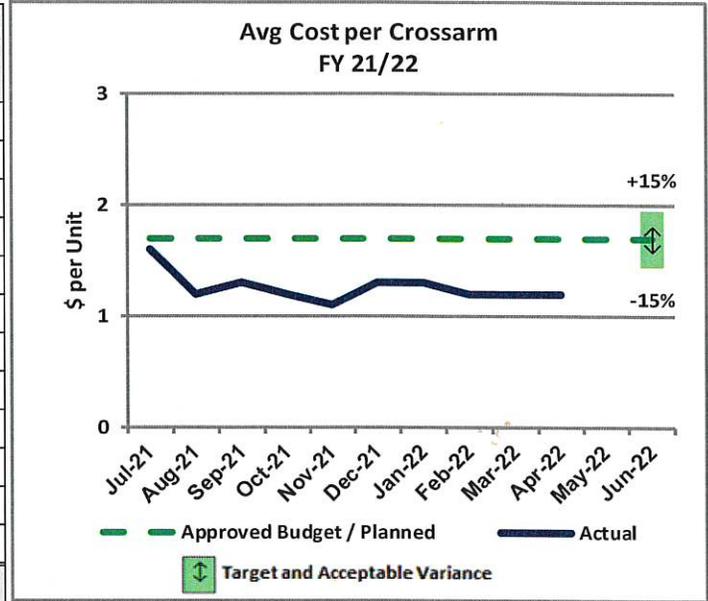
REPORTING PERIOD: April 2022

DEFINITION OF RATES METRIC: Average Unit Cost per Crossarms

TARGET & ACCEPTABLE VARIANCE (FY 21/22): Target = \$1.7K per crossarm; Acceptable Variance = ± 15%

STATUS: Exceeds Target

FYTD as of:	Approved Budget / Planned	Actual	Variance		Re-Estimate (If Applicable)
			Unit or \$	%	
Jul-21	1.7	1.6	(0.1)	-5.9%	
Aug-21	1.7	1.2	(0.5)	-29.4%	
Sep-21	1.7	1.3	(0.4)	-23.5%	
Oct-21	1.7	1.2	(0.5)	-29.4%	
Nov-21	1.7	1.1	(0.6)	-35.3%	
Dec-21	1.7	1.3	(0.4)	-23.5%	
Jan-22	1.7	1.3	(0.4)	-23.5%	
Feb-22	1.7	1.2	(0.5)	-29.4%	
Mar-22	1.7	1.2	(0.5)	-29.4%	
Apr-22	1.7	1.2	(0.5)	-29.4%	
May-22	1.7				
Jun-22	1.7				
Acceptable Variance			± 15%		



SOURCE OF DATA: Jobs P6318 (KPI # 04.01.01.73)

1. BACKGROUND / PURPOSE

- Replace 11,000 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 of \$1.7K per unit.

Contributing factors can be conductor size, whether or not equipment is installed on crossarm, if conductor terminates on crossarm or if crossarm has conductor carrying more than one voltage.

2. ACHIEVEMENTS / MILESTONES MET

- As of April 30, our current to date target is to replace 9,160 crossarms, which is 83% of the fiscal year goal. PTD has completed the replacement of 9,019 crossarms, which is 81.9% of the FY goal, with a current average cost of \$1.2K per unit.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

- PTD will monitor and work with Power Transmission Planning, Regulatory, and Innovation (PTPRI) business group on the Work Management Information System (WMIS) mapping of work requests targeting this job.
- PTD will monitor and ensure efficient work practices and proper capturing of costs to ensure that all costs are being captured correctly.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- PTD is exceeding the target and there is a variance of \$0.5K per unit. For the month of April, the average cost is \$1.2K, which is 29.4% under the approved target. Crossarm replacement costs will fluctuate depending on the difficulty factor of the crossarm replacement.

LADWP RATES METRIC – Average Unit Cost per Mile of Cable (Power)

RESPONSIBLE MANAGER: David Hanson, Power Transmission and Distribution

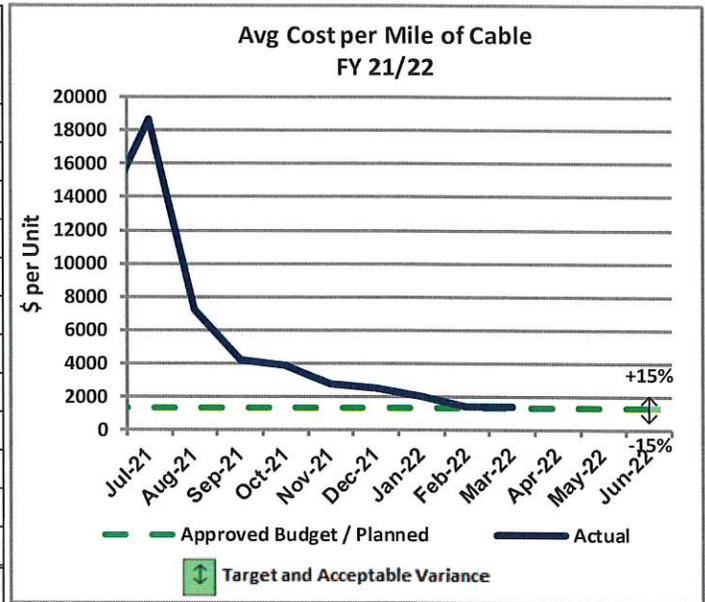
REPORTING PERIOD: April 2022

DEFINITION OF RATES METRIC: Average unit cost per mile of cable replaced

TARGET & ACCEPTABLE VARIANCE (FY 21/22): Target = \$1331.7 per mile of cable replaced; Acceptable Variance = ± 15%

STATUS: Within Acceptable Variance

FYTD as of:	Approved Budget / Planned	Actual	Variance		Re-Estimate (If Applicable)
			Unit or \$	%	
Jul-21	1331.7	18703.0	17371.3	1304.4%	
Aug-21	1331.7	7196.7	5865.0	440.4%	
Sep-21	1331.7	4220.0	2888.3	216.9%	
Oct-21	1331.7	3852.9	2521.2	189.3%	
Nov-21	1331.7	2752.0	1420.3	106.7%	
Dec-21	1331.7	2547.2	1215.5	91.3%	
Jan-22	1331.7	2072.5	740.8	55.6%	
Feb-22	1331.7	1435.9	104.2	7.8%	
Mar-22	1331.7	1423.8	92.1	6.9%	
Apr-21	1331.7	1437.1	105.4	7.9%	
May-22	1331.7				
Jun-22	1331.7				
Acceptable Variance			± 15%		



SOURCE OF DATA: Jobs P6306 (KPI # 04.01.01.74)

1. 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 \$1331.7K per mile.

2. ACHIEVEMENTS / MILESTONES MET

- PTD's annual target is replacement of 50 miles of cable. The actual cable replacement accounted for in April totals 46.4 miles.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- Average cost per mile of cable is \$1,437.1K which is within the acceptable target for the month of April.
- Multiple large scale 4.8kV and 34.5kV cable replacement projects have been completed in the month of April. With Task 145 completed in Work Management Information System (WMIS), cable mileage for these projects can finally be accounted for in correlation with past labor and material charges.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

- PTD will monitor job performance and ensure that time, materials, and labor are being accounted for accurately and appropriately.
- PTD will work with Power Transmission Planning, Regulatory, and Innovation (PTPRI) business group to ensure all work and costs are accounted for with the highest accuracy possible.

Within Acceptable Variance
Outside Acceptable Variance
Exceeds Target
Needs Attention

LADWP RATES METRIC – *Distribution Automation (Power)*

RESPONSIBLE MANAGER: Kodi Uzomah, Power Transmission Planning, Regulatory, & Innovation Division

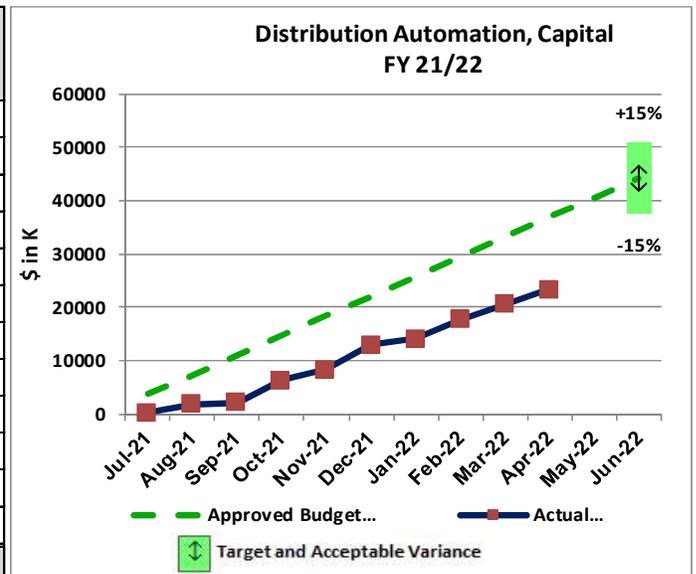
REPORTING PERIOD: April, 2022

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

TARGET & ACCEPTABLE VARIANCE (FY 21/22): Target = \$44,245K; Acceptable Variance = ± 15%

STATUS: **Outside Acceptable Variance**

FYTD as of:	Approved Budget (\$ in K)	Actual (\$ in K)	Variance		Re-Estimate
			\$ in K	%	
Jul-21	3,687.0	352.0	(3,335.0)	-90.5%	
Aug-21	7,374.0	1,872.0	(5,502.0)	-74.6%	
Sep-21	11,061.0	2,152.0	(8,909.0)	-80.5%	
Oct-21	14,748.0	6,293.0	(8,455.0)	-57.3%	
Nov-21	18,435.0	8,357.0	(10,078.0)	-54.7%	
Dec-21	22,122.0	12,975.0	(9,147.0)	-41.3%	
Jan-22	25,809.0	14,120.0	(11,689.0)	-45.3%	
Feb-22	29,496.0	17,758.0	(11,738.0)	-39.8%	
Mar-22	33,183.0	20,685.0	(12,498.0)	-37.7%	
Apr-22	36,870.0	23,328.0	(13,542.0)	-36.7%	
May-22	40,557.0				21,657.2
Jun-22	44,245.0				23,626.0
Acceptable Variance			± 15%		



SOURCE OF DATA: FI 28840/Job P6511 (KPI # 01.03.01.25).

1. BACKGROUND / PURPOSE

- The purpose of the Distribution Automation Program is to help achieve LADWP's vision of being innovative and using the latest technology to improve, modernize, and better maintain our aging Distribution System. By 2021, LADWP envisions to have all the foundational elements in place to build a smarter, more reliable distribution system that effectively utilizes new technology and innovation to improve system reliability and customer experience.

2. ACHIEVEMENTS / MILESTONES

- Installation of 5000 Smart Meters
- Installation of Communication Equipment
- Complete Testing of all Back-Office Applications
- Complete System Integration

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- The program has experienced delays with installation of the communication equipment and delays with equipment delivery. This is due to late receipt from vendors and global supply chain

issues. Initial equipment has been received, but supply chain issues continue to be a potential issue in the case of project change orders. Installations have ramped up with new installation crews, and a reduction in the year end spending forecasting brings the target to approximately \$23.6M.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

- An increase in the amount of spending has occurred and the project spending is tracking close to the re-estimated target. Several orders for additional equipment were placed well in advance to mitigate potential supply chain issues, and have started being received.

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Within Acceptable Variance █ Outside Acceptable Variance █ Exceeds Target █ Needs Attention █

LADWP RATES METRIC – *Distribution Automation, Project Milestones (Power)*

RESPONSIBLE MANAGER: Kodi Uzomah Power Transmission Planning, Regulatory, & Innovation Division

REPORTING PERIOD: April, 2022

DEFINITION OF RATES METRIC: Distribution Automation Project Progress Against Schedule (Target as %)

TARGET & ACCEPTABLE VARIANCE (FY 2122): Target = Complete system integration by June 2022. Variance = N/A

STATUS

INFORMATION ONLY

Project Milestones	Target Dates	Status
Distribution Automation Smart Meters Received	FY 21/22 1 st Qtr. (July 2021 – September 2021)	Complete
Distribution Automation Smart Meters Installed	FY 21/22 2 nd Qtr (October 2021 - December 2021)	Complete
Installation of Pole Top Communication Equipment Completed/Construction of DS-36 Completed	FY 21/22 3 rd Qtr. (January 2022 – March 2022)	In progress
Completion of System Integration	FY 21/22 4 th Qtr. (April 2022 - June 2022)	

SOURCE OF DATA: Distribution Automation Program Schedule

1. BACKGROUND / PURPOSE

The purpose of the Distribution Automation Program is to help achieve LADWP's vision of being innovative and using the latest technology to improve, modernize, and better maintain our aging Distribution System. By 2021, LADWP envisions to have all the foundational elements in place to build a smarter, more reliable distribution system that effectively utilizes new technology and innovation to improve system reliability and customer experience.

2. ACHIEVEMENTS / MILESTONES

- Total of 5,000 Distribution Automation smart meters received.
- Total of 4,250 Distribution Automation smart meters installed.
- Total of 343 pole-top communication equipment installed.

3. PERFORMANCE / VARIANCE ANALYSIS

& YEAR END PROJECTION

- The program has experienced delays with installation of the communication equipment, and equipment delivery. This is due to late receipt from vendors and global supply chain issues. Initial equipment has been received, but supply chain issues continue to be a potential issue in the case of project change orders.

Installations have ramped up with new staff that have been added to installation crews. Completion of communication equipment is expected at the end of 2nd Quarter FY 22/23.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

- The project team is looking at the possibility of further increasing the installation rate of communication equipment, with the recently staffed-up crews. Additional orders of equipment, for mitigating potential supply chain issues, have started being received with full delivery expected by the end of 2022. Attempts are being made on getting extra staffing resources overall to expedite project tasks.

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Within Acceptable Variance



Outside Acceptable Variance



Exceeds Target



Needs Attention



Water System

LADWP RATES METRIC – WATER DISTRIBUTION INFRASTRUCTURE POSITIONS (WATER)

RESPONSIBLE MANAGER: Breonia Lindsey/Sandra Foster

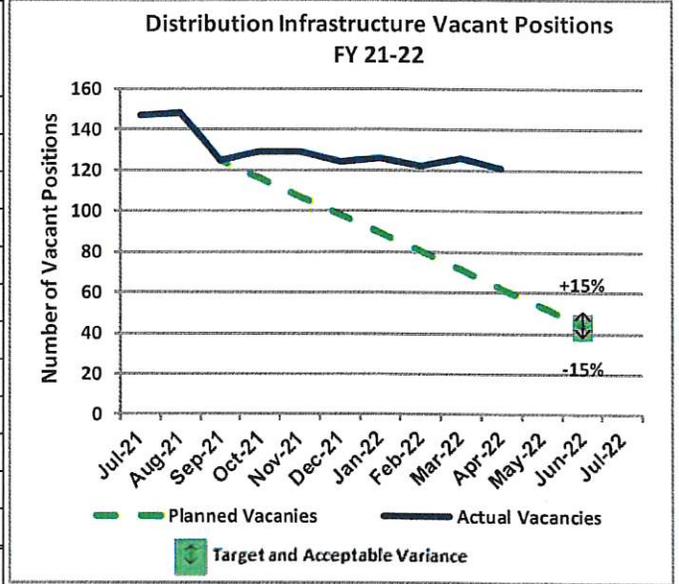
REPORTING PERIOD: April 2022

DEFINITION OF RATES METRIC: Number of Full Time Equivalents (FTEs) hired and dedicated to Water Distribution field position as compared to plan.

TARGET & ACCEPTABLE VARIANCE (FY 21/22): Vacant budgeted Water Distribution Infrastructure field positions at 43 or less by the end of the fiscal year/, ±15%

STATUS: **Outside Acceptable Variance**

FYTD as of:	Planned Vacancies	Actual Vacancies	Variance		Re-Estimate (If Applicable)
			# Vacancies	%	
Jul-21	147	147	0	0.0%	
Aug-21	148	148	0	0.0%	
Sep-21	125	125	0	0.0%	
Oct-21	116	129	13	11.2%	
Nov-21	107	129	22	20.6%	
Dec-21	98	124	26	26.5%	
Jan-22	89	126	37	41.6%	
Feb-22	80	122	42	52.5%	
Mar-22	71	126	55	77.5%	
Apr-22	62	121	59	95.2%	
May-22	53				110
Jun-22	43				106
Acceptable Variance			± 15%		146.5%



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 to reduce vacant budgeted Water Distribution infrastructure field positions to 43 vacancies or less by the end of the fiscal year.

2. ACHIEVEMENTS/MILESTONES MET

- The Division continues hiring infrastructure employees in fiscal year 2021/22, filling existing vacancies in critical infrastructure crews.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- Current rate of hiring budgeted positions is outside the acceptable variance. Due to internal transfers, promotions, and attrition the Division has been unable to reduce the number of field vacancies. The Division will continue hiring efforts to reduce the number of vacant budgeted field positions to reach the revised goal of 106 vacancies or less by the end of the fiscal year.

4. MITIGATION PLAN AND/OR RECOMMENDATIONS

- The Division continues efforts to backfill critical infrastructure positions and reduce budgeted vacancies to meet its future mainline replacement goal.

Within Acceptable Variance Outside Acceptable Variance Exceeds Target Needs Attention

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

RESPONSIBLE MANAGER: April Thang

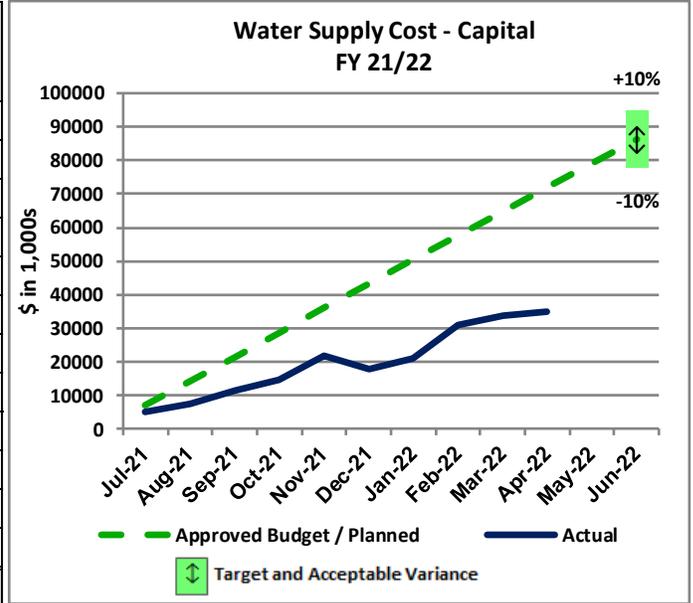
REPORTING PERIOD: April 2022

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

TARGET & ACCEPTABLE VARIANCE (FY 21/22): \$86,362K, 10 percent

STATUS: Outside Acceptable Variance

FYTD as of:	Approved Budget / Planned	Actual	Variance		Re-Estimate (If Applicable)
			Unit or \$	%	
Jul-21	7,196	5,010	-2,186	-30.4%	
Aug-21	14,392	7,604	-6,788	-47.2%	
Sep-21	21,589	11,602	-9,987	-46.3%	
Oct-21	28,785	14,672	-14,113	-49.0%	
Nov-21	35,981	21,751	-14,230	-39.5%	
Dec-21	43,177	18,042	-25,135	-58.2%	
Jan-22	50,373	20,964	-29,409	-58.4%	
Feb-22	57,570	31,032	-26,538	-46.1%	
Mar-22	64,766	33,786	-30,980	-47.8%	
Apr-22	71,962	35,129	-36,833	-51.2%	
May-22	79,158				46,734
Jun-22	86,362				53,176
Acceptable Variance			± 10%		-38.4%



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

1. BACKGROUND / PURPOSE

- Water supply costs include both current supply of water and the development of future supplies necessary to make more resilient and reliable sources of water.
- In addition, water supply costs-capital include capital expenditures from LA Aqueduct A&B South and North, Eastern Sierra Environmental, Water Recycling, Groundwater Management, Watershed-Stormwater Capture, and Water Conservation.

2. ACHIEVEMENTS / MILESTONES MET

- In April 2022, LADWP’s Recycled Water Program started the design phase of the Headworks Direct Potable Reuse Demonstration Project. This Demonstration Facility will allow LADWP to demonstrate the ability to treat wastewater to drinking water standards. LADWP is working closely with the State Board to ensure this demonstration project is protective of public health.

- In February 2022, the Van Norman Exploratory Wells project has completed 100% design.
- In December 2021, LADWP’s Recycled Water Program reached a tentative agreement with Air Products (AP). AP has agreed to use recycled water at their Wilmington Facility, making them the largest recycled water customer in the City of LA. This new agreement will be presented to DWP Board of Commissioners for approval in June of 2022.
- In September 2021, the Van Norman Exploratory Wells project has completed 90% design.
- As of September 2021, Mission Wells is on track to pump DWP’s annual entitlement of approximately 4000 AF from the Sylmar Basin for the first time in nearly a decade.

- Met the Mayor’s Executive Directive No. 5 and Sustainable City pLAN’s goals of reducing dependency on imported water by 20 percent in January 2017. The Department is still on track to meet the 2025 goals.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- Watershed Stormwater Capture jobs are below budgeted levels due to the cancellation of the Whitnall Highway Stormwater Capture Project, the Hansen Dam Water Conservation Project, and the Silver Lake Stormwater Capture Project. Contributing to the underrun are projects being performed by the Bureau of Engineering through lump sum payments. The Strathern Park Stormwater Capture Project and the Stormwater Capture Parks Program are experiencing delays related to the execution of Implementation of Memorandum of Agreements.
- Water Conservation Water Funded jobs are contributing to the underrun. Most of the collaborative programs with other participating utilities were put on hold for safety concerns during the COVID-19 pandemic. In addition, there was a significant decrease in demand for commercial and residential rebates from our customers. However, the goal is to increase participation in our rebate programs with increased marketing and incentive amounts given the current drought conditions.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

- The Water System will continue monitoring the costs to ensure they are in line with the approved budget. Budget re-estimates have been made.

LADWP RATES METRIC – WATER SUPPLY COSTS BUDGET VS ACTUAL- O&M (Water)

RESPONSIBLE MANAGER: April Thang

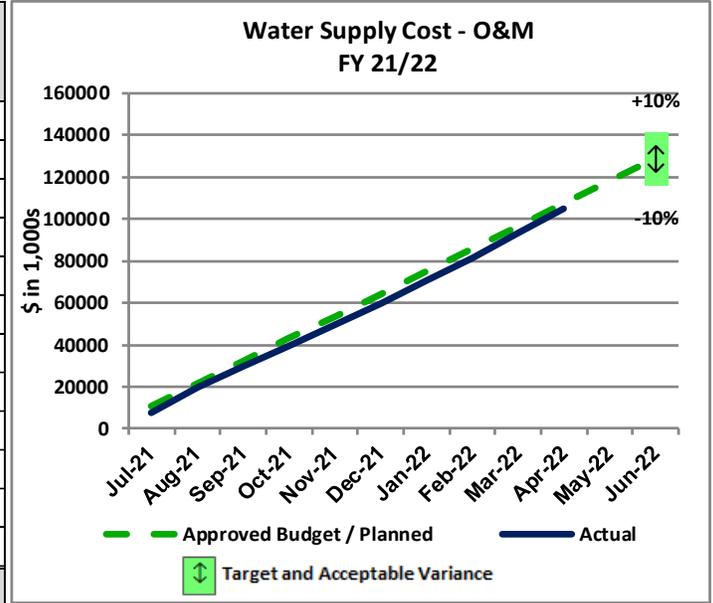
REPORTING PERIOD: April 2022

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

TARGET & ACCEPTABLE VARIANCE (FY 21/22): \$128,951K, 10 percent

STATUS: Within Acceptable Variance

FYTD as of:	Approved Budget / Planned	Actual	Variance		Re-Estimate (If Applicable)
			Unit or \$	%	
Jul-21	10,746	7,741	-3,005	-28.0%	
Aug-21	21,491	19,590	-1,901	-8.8%	
Sep-21	32,237	29,590	-2,647	-8.2%	
Oct-21	42,982	39,528	-3,454	-8.0%	
Nov-21	53,728	49,318	-4,410	-8.2%	
Dec-21	64,474	59,620	-4,854	-7.5%	
Jan-22	75,219	70,778	-4,441	-5.9%	
Feb-22	85,965	81,624	-4,341	-5.0%	
Mar-22	96,710	93,536	-3,174	-3.3%	
Apr-22	107,456	104,961	-2,495	-2.3%	
May-22	118,202				
Jun-22	128,951				
Acceptable Variance			± 10%		



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

1. BACKGROUND / PURPOSE

- Operation and maintenance costs (excluding Purchased Water cost) necessary to sustain a resilient and reliable water supply.
- Water supply costs include operation and maintenance expenditures from LA Aqueduct Operations North and South, LA Aqueduct Maintenance North and South, Resources Management, Stormwater Management, Water Conservation, Water Recycling, Groundwater Pump O&M North, LA Groundwater Pump & SRCE Facility, Pump Booster, Hazardous Substance Management Program, Eastern Sierra Environmental, Groundwater O&M, and Southern District Engineering & Operations.

2. ACHIEVEMENTS / MILESTONES MET

- Completed 583 preventative maintenance tasks for 96 pump station facilities and 372 regulatory bi-weekly maintenance on 45 emergency backup IC Engine units located throughout the Water System.
- There have been seven complete retro fits at both the Valley and Metro Pressure Regulating Stations.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- On target.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

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

LADWP RATES METRIC – Purchased Water (Water)

RESPONSIBLE MANAGER: April Thang

REPORTING PERIOD: April 2022

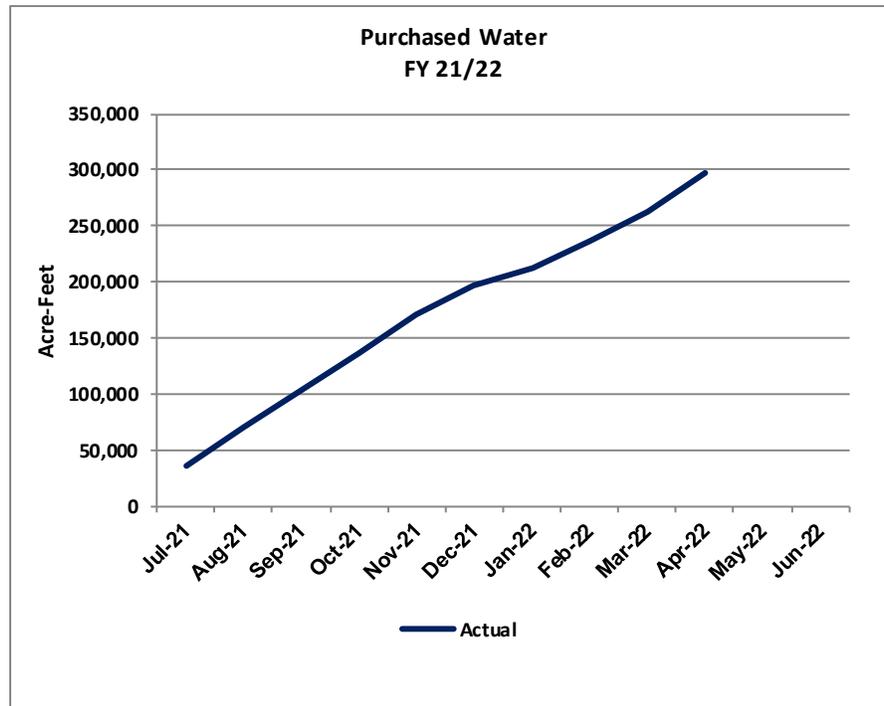
DEFINITION OF RATES METRIC: Annual quantity of purchased water in acre-feet (AF). Information only.

TARGET & ACCEPTABLE VARIANCE (FY 21/22): N/A - for information only

STATUS:

Information Only

FYTD as of:	Actual
Jul-21	36,024
Aug-21	70,597
Sep-21	102,659
Oct-21	136,583
Nov-21	171,331
Dec-21	197,500
Jan-22	212,519
Feb-22	236,024
Mar-22	262,568
Apr-22	297,865
May-22	
Jun-22	



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.

3. MITIGATION PLAN AND / OR RECOMMENDATIONS

- 20% conservation has reduced the overall water use, minimizing purchased water.
- As of April 30, 2022, the combined average of the snow courses measured 3.42 inches. The 2021-2022 snowfall season closed as a 36% of normal year.

2. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- During normal weather conditions annual amount of purchased water is 150,808 AF.
- Due to drier weather conditions, less water is available from the Los Angeles Aqueduct and the amount of purchased water is currently higher than in years with normal conditions.

LADWP RATES METRIC – RECYCLED WATER DELIVERED (Water)

RESPONSIBLE MANAGER: Jianping Hu Jianping Hu

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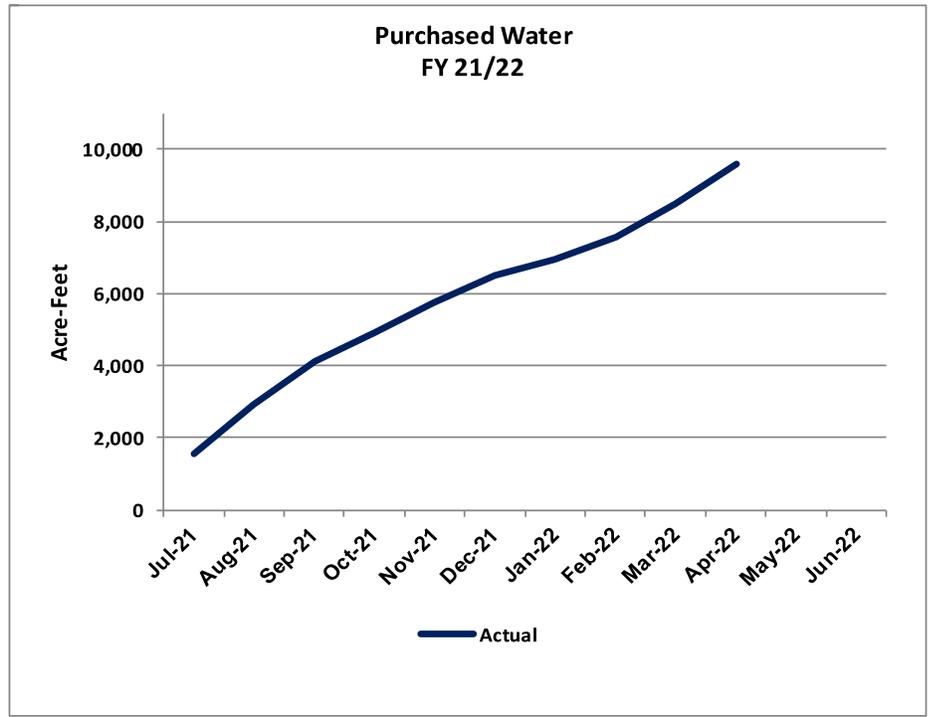
REPORTING PERIOD: April 2022

DEFINITION OF RATES METRIC: Annual quantity of purchased water in acre-feet (AF). Information only.

TARGET & ACCEPTABLE VARIANCE (FY 21/22): N/A - for information only

STATUS: Information Only

FYTD as of:	Actual
Jul-21	1,554
Aug-21	2,932
Sep-21	4,116
Oct-21	4,906
Nov-21	5,733
Dec-21	6,506
Jan-22	6,951
Feb-22	7,562
Mar-22	8,489
Apr-22	9,586
May-22	
Jun-22	



SOURCE OF DATA: Customer Recycled Water Meter Reads

1. BACKGROUND / PURPOSE

- Recycled Water (RW) is one of the local supply strategies to meet the Mayor’s Sustainable City pLAn to reduce dependency on imported water.

2. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- The recycled water deliveries are expected to meet the FY 21/22 forecast by fiscal year-end.

3. MITIGATION PLAN AND / OR RECOMMENDATIONS

- Continue to deliver recycled water to existing customers.
- Identify barriers and challenges to work with prospective recycled water customers in close proximity to RW infrastructure to expand RW deliveries.

LADWP RATES METRIC – STORMWATER CAPACITY (Water)

RESPONSIBLE MANAGER: David R. Pettijohn



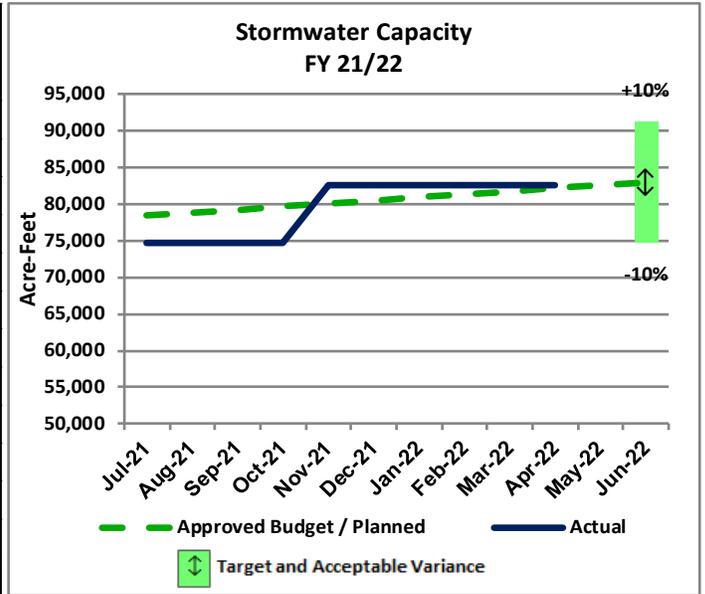
REPORTING PERIOD: April 2022

DEFINITION OF RATES METRIC: Stormwater system capacity milestones in acre-feet (AF) against plan.

TARGET & ACCEPTABLE VARIANCE (FY 21/22): 83,000 AFY; 10% variance

STATUS: Within Acceptable Variance

FYTD as of:	Approved Budget / Planned	Actual	Variance		Re-Estimate (If Applicable)
			Unit or \$	%	
Jul-21	78,417	74,626	-3,791	-4.8%	
Aug-21	78,833	74,626	-4,207	-5.3%	
Sep-21	79,250	74,626	-4,624	-5.8%	
Oct-21	79,667	74,626	-5,041	-6.3%	
Nov-21	80,083	82,626	2,543	3.2%	
Dec-21	80,500	82,626	2,126	2.6%	
Jan-22	80,917	82,626	1,709	2.1%	
Feb-22	81,333	82,626	1,293	1.6%	
Mar-22	81,750	82,626	876	1.1%	
Apr-22	82,167	82,626	459	0.6%	
May-22	82,583				
Jun-22	83,000				
Acceptable Variance			± 10%		



SOURCE OF DATA: Summary of Major Stormwater Capture Projects Report

1. BACKGROUND / PURPOSE

- Projects to meet the Water System’s long term strategic goals for improved water supply reliability, consistent with the 2020 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

- Completed projects include:
 - Tujunga Spreading Grounds (8,000 AFY).
- Projects in construction include:
 - Pacoima Spreading Grounds Improvement Project (5,300 AFY), is 15% complete.

• Projects in Design/Planning include:

- San Fernando Regional Park Stormwater Capture Project (200 AFY), construction contract has been awarded, awaiting issuance of Notice to Proceed #2.
- Silver Lake Reservoir Stormwater Capture Project (63 AFY), 100% design in progress.
- Stormwater Capture Parks Program: Fernangeles Park (202 AFY), Valley Village Park (136 AFY), Strathern Park North (225 AFY), Valley Plaza Park North (398 AFY), Valley Plaza Park South (158 AFY), David M. Gonzales (448 AFY), North Hollywood Park (1,150 AFY), Alexandria Park (72 AFY), Whitsett Fields Park North (185 AFY), 100% design plans in progress.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- On target.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

- Continue ongoing work as planned.

Within Acceptable Variance Outside Acceptable Variance Exceeds Target Needs Attention

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

RESPONSIBLE MANAGER: Darin Willey

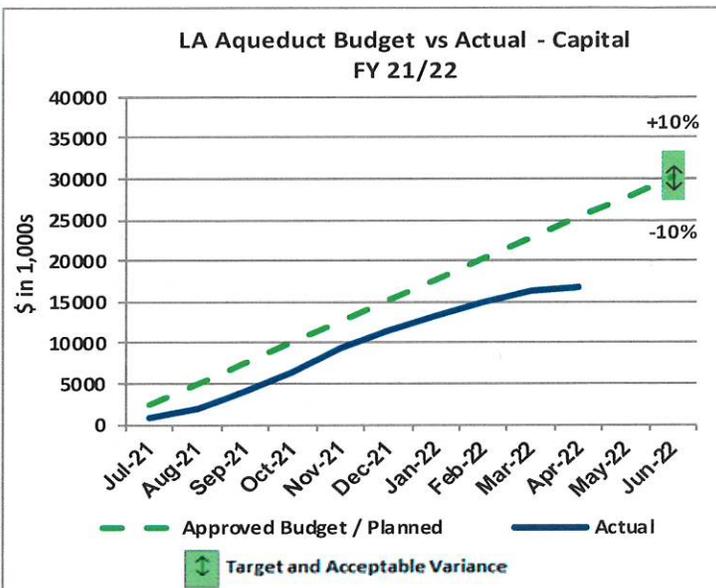
REPORTING PERIOD: April 2022

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

TARGET & ACCEPTABLE VARIANCE (FY 21/22): \$30,320, 10 percent

STATUS: **Outside Acceptable Variance**

FYTD as of:	Approved Budget / Planned	Actual	Variance		Re-Estimate (If Applicable)
			\$	%	
Jul-21	2,526	790	-1,736	-68.7%	
Aug-21	5,053	1,929	-3,124	-61.8%	
Sep-21	7,579	4,106	-3,473	-45.8%	
Oct-21	10,105	6,355	-3,750	-37.1%	
Nov-21	12,632	9,400	-3232	-25.6%	
Dec-21	15,158	11,492	-3666	-24.2%	
Jan-22	17,685	13,370	-4315	-24.4%	
Feb-22	20,211	14,937	-5274	-26.1%	
Mar-22	22,737	16,344	-6393	-28.1%	
Apr-22	25,264	16,747	-8517	-33.7%	
May-22	27,790				23,219
Jun-22	30,320				26,311
Acceptable Variance			± 10%		-13.2%



SOURCE OF DATA: FIs 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

- Los Angeles Aqueduct Top Removal Project is 100% complete.
- Scope of Work on the Grant Lake Roto Valve Project is about 50% complete.
- Walker Slide Gate Replacement Project is 100% complete.
- Updated designs focused on Safety & Operations were needed for the Grant Lake Spillway Modification Project. As a result, construction was delayed and is now expected to begin around Spring 2023. The updated designs are about 50% complete.
- Laws Planting Project is 100% complete. Planted 32,000 native shrubs and grasses.

- Laws 118 Project is 100% complete. Installed 2,000 ft of mainline and 8,000 ft of tubing.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- Aqueduct Capital is expected to be below the FY 21-22 target at fiscal year-end. Several capital projects have been postponed due to delays in planning and permitting, such as the North Haiwee Dam Project and Grant Lake Roto Valve Project. The Scope of Work for the Grant Lake Roto Valve Project is still being negotiated. Power Construction and Maintenance is rescheduling work due to Covid-19.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

- Continue to work with Water Engineering and Technical Services, and Power Construction and Maintenance to move projects forward.

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

RESPONSIBLE MANAGER: Darin Willey *Darin Willey*

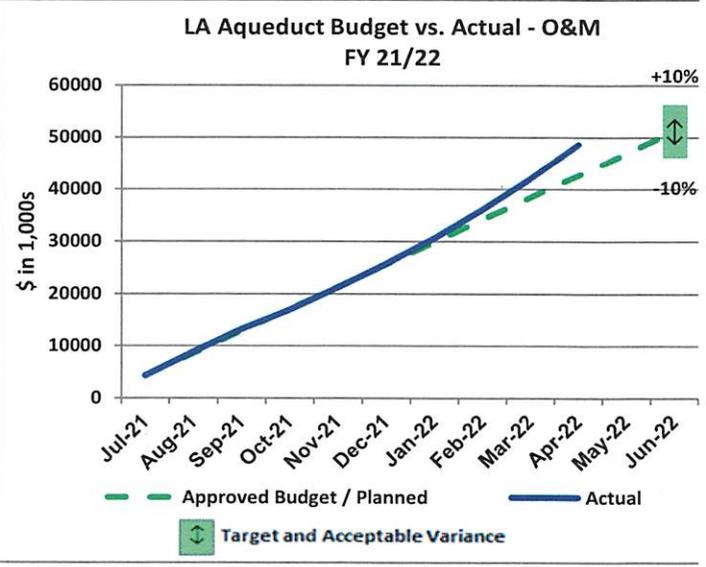
REPORTING PERIOD: April 2022

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

TARGET & ACCEPTABLE VARIANCE (FY 21/22) \$51,194, 10 percent

STATUS: Needs Attention

FYTD as of:	Approved Budget / Planned	Actual	Variance		Re-Estimate (If Applicable)
			\$	%	
Jul-21	4,266	4,291	25	0.6%	
Aug-21	8,532	8,822	290	3.4%	
Sep-21	12,798	13,187	389	3.0%	
Oct-21	17,064	16,918	-146	-0.9%	
Nov-21	21,330	21,278	-52	-0.2%	
Dec-21	25,596	25,691	95	0.4%	
Jan-22	29,862	30,597	735	2.5%	
Feb-22	34,128	36,031	1903	5.6%	
Mar-22	38,393	41,958	3565	9.3%	
Apr-22	42,659	48,585	5926	13.9%	
May-22	46,925				
Jun-22	51,194				
Acceptable Variance			± 10%		



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 high flow in the Aqueduct (as per the first two months of the year), operations and maintenance focus is to manage the run-off.

2. ACHIEVEMENTS / MILESTONES MET

- Fiscal Year to date Aqueduct crews have:
- Mowed 103 acres for resource clearing;
 - Graded 197 miles of roads;
 - Mowed 256 miles of canals and ditches;
 - Cleaned 52 miles of canals and ditches;
 - Installed 11 miles of fencing;
 - Installed 83 data logger/station retrofits.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- Aqueduct has focused on operations and maintenance work in the beginning of the year. Crews were able to perform substantial O&M and resource management.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

- Crews will continue performing substantial facility maintenance at Mojave and Dry Canyon, as well as continue working towards Operational and Maintenance goals set for FY 21/22.

LADWP RATES METRIC – GALLONS PER CAPITA PER DAY (GPCD)(Water)

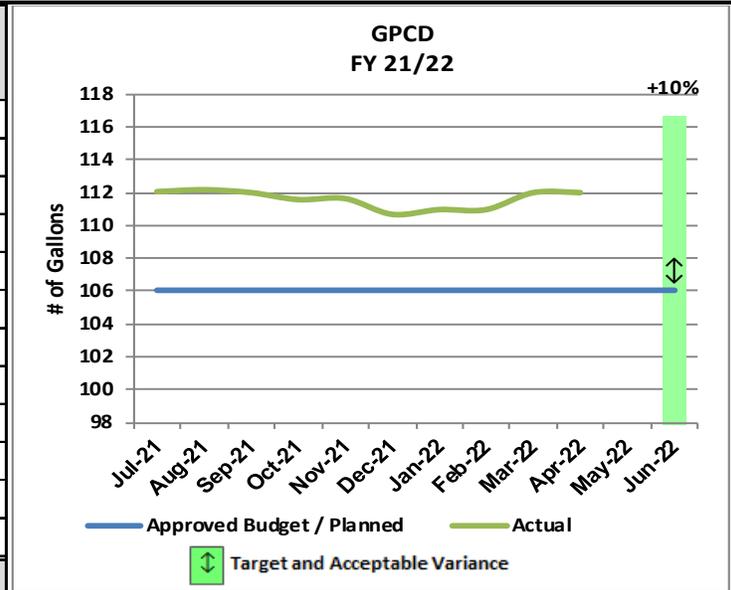
RESPONSIBLE MANAGER: Terrence McCarthy *Terrence McCarthy*

REPORTING PERIOD: April 2022

DEFINITION OF RATES METRIC: Level of water conservation against target GPCD.

TARGET & ACCEPTABLE VARIANCE (FY 20/21): 106 GPCD & 10% Acceptable Variance

FYTD as of:	Approved Budget / Planned	Actual	Variance		Re-Estimate of Budget/Planned
			GPCD	%	
Jul-21	106	112	6	5.7%	
Aug-21	106	112	6	5.8%	
Sep-21	106	112	6	5.7%	
Oct-21	106	112	6	5.3%	
Nov-21	106	112	6	5.3%	
Dec-21	106	111	5	4.5%	
Jan-22	106	111	5	4.7%	
Feb-22	106	111	5	4.7%	
Mar-22	106	112	6	5.7%	
Apr-22	106	112	6	5.7%	
May-22	106				
Jun-22	106				
Acceptable Variance			± 10%		



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.
- Governor Newsom declared a statewide drought emergency on October 19, 2021.
- On March 28, 2022 Governor Newsom issued Executive order no 7-77 which requires water suppliers to move to level 2 of their Water Shortage Contingency Plans.

2. ACHIEVEMENTS / MILESTONES MET

- On January 1, 2017, LADWP met the pLAN goal of 20 percent reduction in GPCD.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- Customer water per capita use has increased due to the driest first three months in the states recorded history.
- 12-month rolling GPCD is anticipated to remain the same or increase marginally due to the limited precipitation.

- LADWP’s Water Conservation Response Unit has increased its community presence to educate residential and commercial customers about the importance of implementing conservation practices and respond to water waste complaints received from the public.

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 2020 Urban Water Management Plan.
- On May 24th, the State Water Resource Control Board adopted Emergency Drought Conservation Regulations aimed at banning the irrigation of non-functional turf for the CII sector. Adoption of the regulations will aid in further reducing customer demands and are expected to take effect June 16th.

LADWP RATES METRIC – FIXED ASSETS REPLACEMENT BUDGET VS ACTUAL (Water)

RESPONSIBLE MANAGER: April Thang *AT*

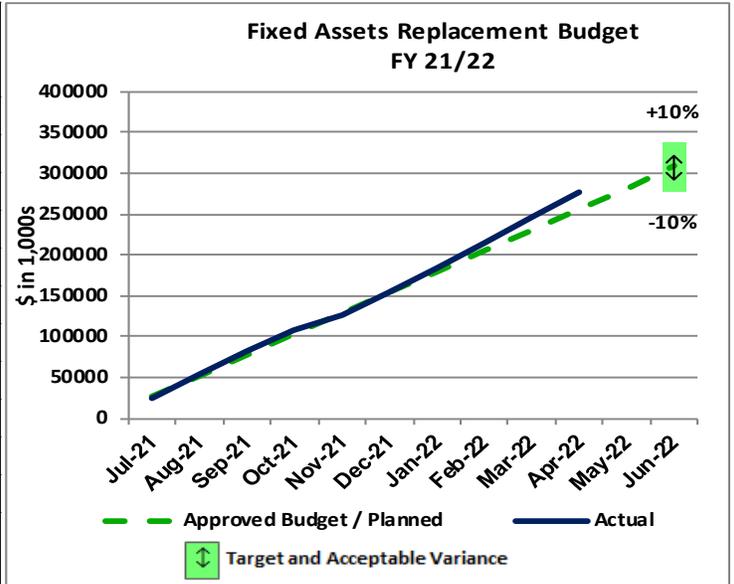
REPORTING PERIOD: April 2022

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

TARGET & ACCEPTABLE VARIANCE (FY 21/22): \$308,260K, 10 percent

STATUS: Within Acceptable Variance

FYTD as of:	Approved Budget / Planned	Actual	Variance		Re-Estimate (If Applicable)
			\$	%	
Jul-21	25,687	24,444	-1,243	-4.8%	
Aug-21	51,373	55,094	3,721	7.2%	
Sep-21	77,060	81,952	4,892	6.3%	
Oct-21	102,747	107,485	4,738	4.6%	
Nov-21	128,434	127,296	-1,138	-0.9%	
Dec-21	154,120	153,829	-291	-0.2%	
Jan-22	179,807	184,349	4,542	2.5%	
Feb-22	205,494	214,689	9,195	4.5%	
Mar-22	231,181	247,308	16,127	7.0%	
Apr-22	256,867	276,096	19,229	7.5%	
May-22	282,554				
Jun-22	308,260				
Acceptable Variance			± 10%		



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, trunk line replacement, pump stations, regulator stations, tanks and other key Water System facilities.

2. ACHIEVEMENTS / MILESTONES MET

As of April 2022:

- 157,590 feet of mainline have been installed.
- 5,840 feet of the open trench portion of 54-inch diameter earthquake resistant pipe, Foothill TL Unit 3 Phase II, have been installed.
- 13 pumps were replaced/retrofitted.
- 7 Regulator/Relief Stations were retrofitted.
- Tinemaha Dam Replacement Project:
 - In April 2022, Geotech group performed subsurface field investigation to

evaluate potential borrow sites for fill materials to construct a new dam embankment, and collected, tested, and evaluated the quality of the riprap on the existing dam for possible reuse in the new dam.

- LADWP filed a Notice of Exemption (NOE) to conduct additional geotechnical investigations in the vicinity of the Tinemaha Dam under the supervision of the Division of Safety of Dams (DSOD). NOE was posted to the Inyo County Clerk’s Office in March 2022.
- DSOD issued a Notice to Proceed for proposed geotechnical investigation on and in the vicinity of Tinemaha Dam in March 2022.
- The project was introduced to California Department of Fish and Wildlife and the Tribal Historic Preservation Officers in December 2021.
- LADWP developed and completed a detailed risk assessment of operational impacts and environmental impacts of

Within Acceptable Variance Outside Acceptable Variance Exceeds Target Needs Attention

the east side outlet alternative in October 2021.

- Green Verdugo Reservoir Floating Cover Replacement Project:
 - The project construction is 85% complete.
 - The floating cover contractor completed chafer installation on the reservoir slopes in December 2021. Contractor is making progress on the floating cover installation and paving of the reservoir perimeter road is anticipated to be completed in May 2022.
 - LADWP crews continue working on the control building and areas outside of the reservoir.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- The rate of Fixed Assets Replacement was within acceptable variance for the reporting period.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

- Continue to hire staff to accomplish the Water Infrastructure Plan goals.

LADWP RATES METRIC – MAINLINE REPLACEMENT (Water)

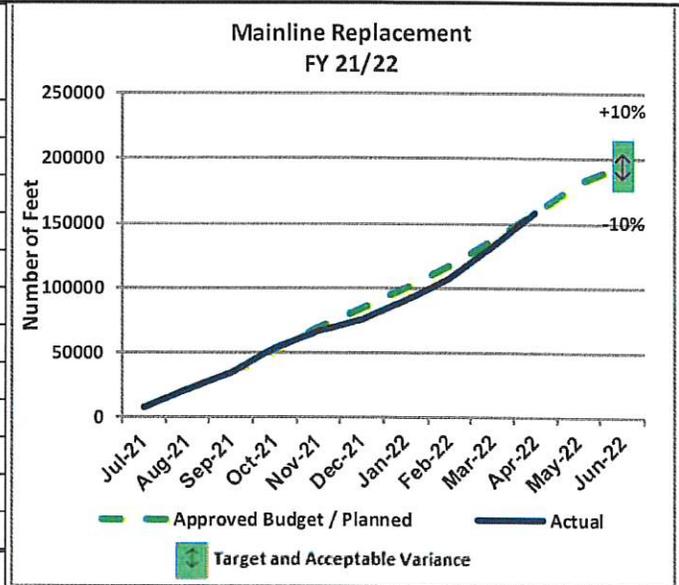
RESPONSIBLE MANAGER: Breonia Lindsey/Sandra Foster

REPORTING PERIOD: April 2022

DEFINITION OF RATES METRIC: Feet of mainline replaced against plan.

TARGET & ACCEPTABLE VARIANCE (FY 21/22): 195,000 feet, ±10%

FYTD as of:	Approved Budget / Planned	Actual	Variance		Re-Estimate (If Applicable)
			Feet	%	
Jul-21	7,738	7,738	0	0.0%	
Aug-21	22,024	22,024	0	0.0%	
Sep-21	34,341	34,341	0	0.0%	
Oct-21	52,834	53,313	479	0.9%	
Nov-21	69,516	66,179	-3337	-4.8%	
Dec-21	84,079	75,966	-8113	-9.6%	
Jan-22	100,105	90,615	-9490	-9.5%	
Feb-22	117,086	107,423	-9663	-8.3%	
Mar-22	137,248	132,558	-4690	-3.4%	
Apr-22	157,731	157,590	-141	-0.1%	
May-22	180,495				
Jun-22	195,000				
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.

2. ACHIEVEMENTS / MILESTONES MET

- As of April 2022, 157,590 feet of mainline have been installed.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- The rate of mainline replacement for this reporting period is within the acceptable variance. The Division anticipates meeting the mainline replacement goal by the end of the fiscal year. The Division continues targeted hiring of field positions to ensure adequate staffing dedicated to infrastructure replacement.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

- The Division will continue with planned hiring and training for mainline crews to reach the replacement rate of 240,000 feet of pipe per year, by FY 2024/25, resulting in a replacement cycle of 150 years and meet customer demand for new installations.

LADWP RATES METRIC – TRUNK LINE REPLACEMENT (Water)

RESPONSIBLE MANAGER: Jianping Hu Jianping Hu

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Date: 2022.06.27 15:48:11 -0700'

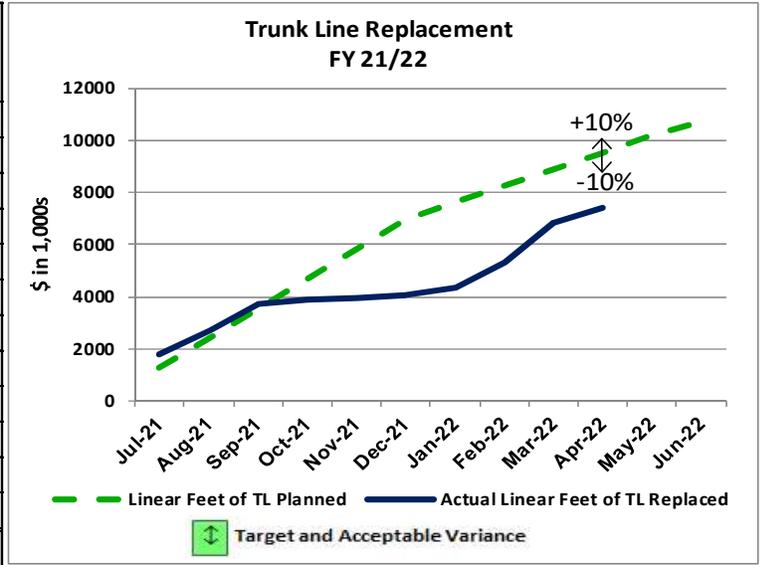
REPORTING PERIOD: April 2022

DEFINITION OF RATES METRIC: Feet of trunk line replaced against the plan.

TARGET & ACCEPTABLE VARIANCE (FY 21/22): 10,700 feet, 10 percent

STATUS: Outside Acceptable Variance

FYTD as of:	Linear Feet of TL Planned	Actual Linear Feet of TL Replaced	Variance		Re-Estimate (If Applicable)
			ft	%	
Jul-21	1,270	1,769	499	39.3%	
Aug-21	2,390	2,682	292	12.2%	
Sep-21	3,535	3,696	161	4.6%	
Oct-21	4,680	3,867	-813	-17.4%	
Nov-21	5,825	3,931	-1,894	-32.5%	
Dec-21	6,970	4,084	-2,886	-41.4%	
Jan-22	7,615	4,351	-3,264	-42.9%	
Feb-22	8,260	5,281	-2,979	-36.1%	
Mar-22	8,895	6,847	-2,048	-23.0%	
Apr-22	9,530	7,381	-2,149	-22.5%	
May-22	10,165				8,970
Jun-22	10,700				10,300
Acceptable Variance			± 10%		-3.7%



SOURCE OF DATA: FI 23222 - Jobs 23117, 23435; FI 26220 - Jobs 23095, 23213, 23137, 23522, 23528, 23548.

1. BACKGROUND / PURPOSE

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

- 1,464 feet of trunk line was installed on Coronado Trunk Line through April 2022.
- 531 feet of trunk line was installed on City Trunk Line North Unit 2 through April 2022.
- 800 feet of trunk line was installed on River Supply Conduit (RSC) Lower Reach Unit 1A Project through March 2022.

2. ACHIEVEMENTS / MILESTONES MET

- 100% of the construction of Century Trunk Line Unit 1 Phase 2A was completed in September 2021.
- 100% of the construction by Trunk Line Construction for Stone Canyon & Sunset West Trunk Line Unit 1 Phase 1 was completed in August 2021.
- 100% of the construction of Machado Lake Pipeline was completed in July 2021.
- 731 feet of trunk line was installed on Century Trunk Line Unit 1 Phase 1 through April 2022.
- 2,092 feet of trunk line was installed on City Trunk Line South Unit 3 through April 2022.
- 1,115 feet of trunk line was installed on Foothill Trunk Line through April 2022.

3. PERFORMANCE / VARIANCE ANALYSIS AND YEAR-END PROJECTION

- Century Trunk Line Phase 1 installation experienced delays due to Caltrans permit.
- City Trunk Line South Unit 3 experienced delays due to unforeseen interfering substructures.
- Foothill Trunk Line experienced delays due to unforeseen soil conditions.
- Coronado Trunk Line experienced delays due to labor resource shortage.
- City Trunk Line North Unit 2 experienced delays due to La Brea leak repairs.
- The trunk line replacement goal was increased in January, with the addition of the River Supply Conduit (RSC) Lower Reach Unit 1A Project; however, due to construction delays, the division is now

projecting that 10,300 trunk line feet will be replaced by end of fiscal year.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

- Continue ongoing and additional trunk line replacement projects to achieve FY 21-22 goals.

LADWP RATES METRIC – METER REPLACEMENT (Water)

RESPONSIBLE MANAGER: Breonia Lindsey/Sandra Foster

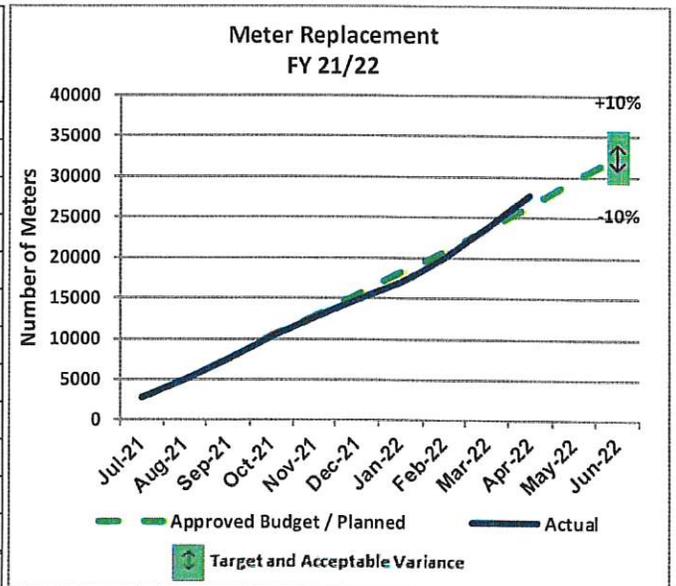
REPORTING PERIOD: April 2022

DEFINITION OF RATES METRIC: Number of meters replaced against plan.

TARGET & ACCEPTABLE VARIANCE (FY 21/22): 32,500 meters, ±10%

STATUS: Within Acceptable Variance

FYTD as of:	Approved Budget / Planned	Actual	Variance		Re-Estimate (If Applicable)
			Meters	%	
Jul-21	2,615	2,615	0	0.0%	
Aug-21	4,964	4,964	0	0.0%	
Sep-21	7,412	7,412	0	0.0%	
Oct-21	10,269	10,098	-171	-1.7%	
Nov-21	12,776	12,481	-295	-2.3%	
Dec-21	15,360	14,848	-512	-3.3%	
Jan-22	18,136	16,890	-1246	-6.9%	
Feb-22	20,672	19,932	-740	-3.6%	
Mar-22	23,529	23,713	184	0.8%	
Apr-22	26,424	27,682	1258	4.8%	
May-22	29,527				
Jun-22	32,500				
Acceptable Variance			± 10%		



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.

2. ACHIEVEMENTS / MILESTONES MET

- As of April 2022, 27,682 meters of the 32,500 fiscal year goal have been replaced.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- The rate of meter replacement for this reporting period is within the acceptable variance, and is trending higher than the goal.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

- The Division will continue efforts to fill vacancies to provide the needed support for meter replacement and continues to make progress on increasing the rate of meter replacement.

LADWP RATES METRIC – WATER QUALITY CAPITAL BUDGET VS ACTUAL (Water)

RESPONSIBLE MANAGER: Jianping Hu Jianping Hu

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Date: 2022.06.03 08:58:26 -0700

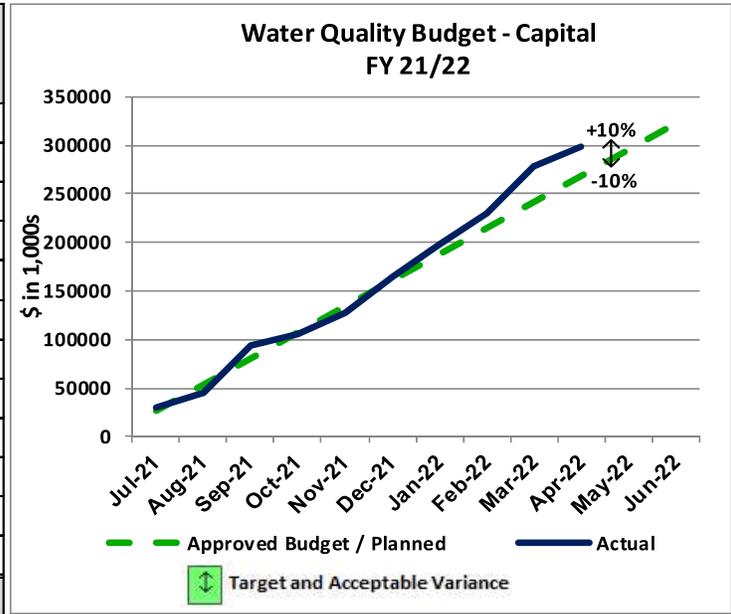
REPORTING PERIOD: April 2022

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

TARGET & ACCEPTABLE VARIANCE (FY 21/22): \$323M, 10 percent

STATUS: **Needs Attention**

FYTD as of:	Approved Budget / Planned	Actual	Variance		Re-Estimate (If Applicable)
			\$	%	
Jul-21	\$ 26,897	\$ 30,315	3,888	13.0%	
Aug-21	\$ 53,794	\$ 46,032	-5,868	-9.8%	
Sep-21	\$ 80,691	\$ 93,053	12,362	15.3%	
Oct-21	\$ 107,588	\$ 105,267	-2,321	-2.2%	
Nov-21	\$ 134,486	\$ 127,665	-6,821	-5.1%	
Dec-21	\$ 161,383	\$ 165,071	3,688	2.3%	
Jan-22	\$ 188,280	\$ 198,652	10,372	5.5%	
Feb-22	\$ 215,177	\$ 229,235	14,058	6.5%	
Mar-22	\$ 242,074	\$ 277,880	35,806	14.8%	
Apr-22	\$ 268,971	\$ 299,105	30,134	11.2%	
May-22	\$ 295,868				
Jun-22	\$ 322,780				
Acceptable Variance			± 10%		



SOURCE OF DATA: Fls 23222, 24130, 24310, 24305, 24316, 27215, and 29130.

1. BACKGROUND / PURPOSE

- Water System’s water quality program includes projects required to meet water quality regulations and accomplish groundwater remediation goals.
- Goals for FY21/22 include completing construction of MWD-LA 30 Connection and LA Reservoir UV Disinfection Plant. Goals also include reaching 50% construction complete for San Fernando Groundwater Basin Remediation Projects (North Hollywood Centralized Treatment and Tujunga Centralized Treatment) and LAAFP Oxygen Generation System Upgrade.

- Tujunga Centralized Treatment: As of April 2022, construction reached 50% complete.
- Hollywood West Wellhead Treatment: As of April 2022, construction reached 90% complete.
- Headworks Flow Control Station: As of January 2022, mobilization and site preparation are completed. Trailers have been moved in and construction has started.

2. ACHIEVEMENTS / MILESTONES MET

- MWD-LA 30 Connection: As of September 2021, the construction of contractor pipeline work is completed.
- LA Reservoir UV Disinfection Plant: As of April 2022, construction is 100% complete. The commissioning is completed and the facility is in service.

3. PERFORMANCE / VARIANCE ANALYSIS AND YEAR-END PROJECTION

- North Hollywood Centralized Treatment and Tujunga Centralized Treatment are ramping up with accelerated construction.
- Hollywood West Wellhead Treatment has increasing expenditures for Power Construction & Management (PC&M) construction charges, Owner's Agent consulting charges, and material procurement.
- The contract for Headworks Flow Control Station has been amended and the project

Within Acceptable Variance Outside Acceptable Variance Exceeds Target Needs Attention

scope changes and additional construction expenditures have been reflected in the March and upcoming invoices.

- LA Res UV Disinfection Plant 2nd Amendment has been extended to account for increasing construction expenditures and productivity due to the COVID-19 pandemic.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

- Continue ongoing work as planned.

LADWP RATES METRIC – WATER QUALITY BUDGET VS ACTUAL-O&M

Nelson Mejia
(Water)

RESPONSIBLE MANAGER: Nelson Mejia

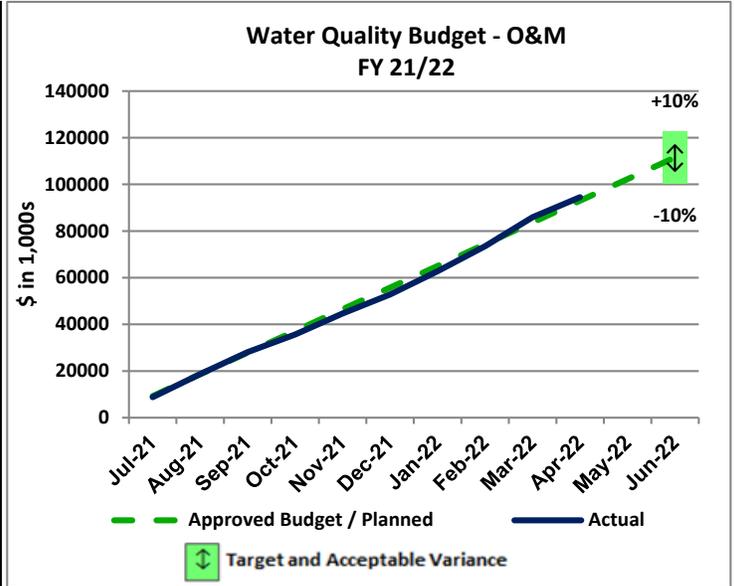
REPORTING PERIOD: April 2022

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

TARGET & ACCEPTABLE VARIANCE (FY 21/22): \$111,543K, 10 percent

STATUS: Within Acceptable Variance

FYTD as of:	Approved Budget / Planned	Actual	Variance		Re-Estimate (If Applicable)
			\$	%	
Jul-21	9,295	8,775	-520	-5.6%	
Aug-21	18,590	18,677	87	0.5%	
Sep-21	27,885	28,085	200	0.7%	
Oct-21	37,180	35,702	-1,478	-4.0%	
Nov-21	46,475	44,639	-1,836	-4.0%	
Dec-21	55,770	52,868	-2,902	-5.2%	
Jan-22	65,065	62,763	-2,302	-3.5%	
Feb-22	74,360	73,502	-858	-1.2%	
Mar-22	83,655	85,894	2,239	2.7%	
Apr-22	92,950	94,540	1,590	1.7%	
May-22	102,245				
Jun-22	111,543				
Acceptable Variance			± 10%		



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

Fiscal Year-to-Date

- Water Quality Groundwater O&M completed 5,894 groundwater samplings required for regulatory permits and Prop 1 Grant Program projects.
- Water Quality Control collected 26,372 regulatory required water quality samples from distribution system and supply sources, and made significant operational adjustments as well as developed safety protocols in light of COVID-19, wildfires, and other events.

- Water Quality Customer Care has processed Memoranda of Understanding with the following City Departments: Recreation and Parks, General Services, Los Angeles World Airport, Los Angeles Public Library, Streets LA, Los Angeles Zoo and Los Angeles City Tourism Department for the Hydration Station Initiative Program (HSIP). To date, 115 hydration stations have been installed in partnership with HSIP with reimbursements totaling \$538,408.
- Community Outreach-Water Quality Customer Care selected two non-profit organizations, WeTap and the Council of Mexican Federations in North America (COFEM), to conduct public outreach and education campaigns that promote LADWP’s high quality water, and communicates the environmental, health and economic benefits of drinking tap water.

- Water System received delivery of the second NO-DES Flushing Truck on 3/18/2022. The water-saving mainline flushing activities using this truck are anticipated to begin in FY 22/23 with support from the Water Operations, Water Distribution, and Water Quality Divisions.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- Water Quality O&M expenditures are within acceptable variance.

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 O&M [Water]

RESPONSIBLE MANAGER: Paul Liu

Paul Liu

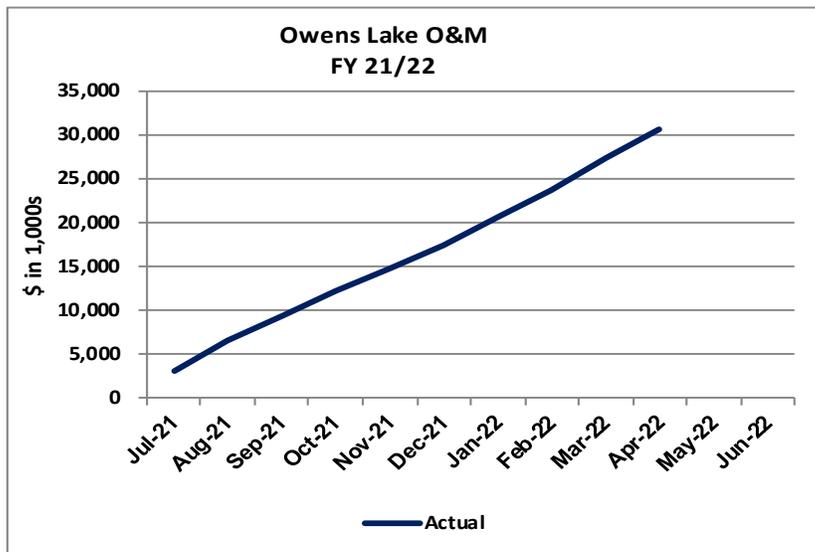
REPORTING PERIOD: April 2022

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

TARGET& ACCEPTABLE VARIANCE (FY 21/22): N/A – for information only

STATUS: **Information Only**

FYTD as of:	Actual
Jul-21	3,076
Aug-21	6,508
Sep-21	9,482
Oct-21	12,114
Nov-21	14,899
Dec-21	17,489
Jan-22	20,557
Feb-22	23,806
Mar-22	27,356
Apr-22	30,552
May-22	
Jun-22	



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 during the dust season, which lasts from October 16th through June 30th, is a regulatory mandate to ensure air quality in the area.

- O&M staff has completed work related to a re-flood order received from the Great Basin on dust control area, Tillage T-16, as well as Brine, T29-4.

2. ACHIEVEMENTS / MILESTONES MET

- Owens Lake O&M and Construction personnel continued performing maintenance of shallow flood areas.
- Maintenance of Dynamic Water Management Areas was completed in November.
- Road maintenance continued.
- Ongoing maintenance in numerous tillage areas is ongoing.
- Compliance issues within multiple shallow flood areas triggered a Notice to Comply from Great Basin. Operations and maintenance staff working to enhance compliance within problem areas ahead of the 2022-2023 dust season.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- On target.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

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

Joint System

LADWP RATES METRIC – Total FTEs Against Plan

Michael J. Johnson

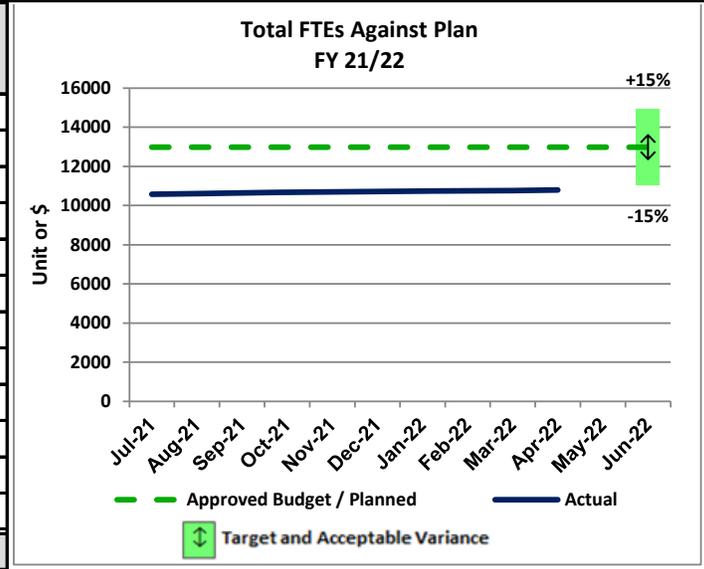
RESPONSIBLE MANAGER: Monique Earl

REPORTING PERIOD: April 2022

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

TARGET & ACCEPTABLE VARIANCE (FY 21/22): +/- 15%

FYTD as of:	Approved Budget / Planned	Actual	Variance		Re-Estimate (If Applicable)
			Unit or \$	%	
Jul-21	12,989	10,582	-2407	-18.5%	
Aug-21	12,989	10,615	-2374	-18.3%	
Sep-21	12,989	10,642	-2347	-18.1%	
Oct-21	12,989	10,690	-2299	-17.7%	
Nov-21	12,989	10,699	-2290	-17.6%	
Dec-21	12,989	10,714	-2275	-17.5%	
Jan-22	12,989	10,752	-2237	-17.2%	
Feb-22	12,989	10,752	-2237	-17.2%	
Mar-22	12,989	10,768	-2221	-17.1%	
Apr-22	12,989	10,787	-2202	-17.0%	
May-22	12,989				
Jun-22	12,989				
Acceptable Variance			± 15%		



SOURCE OF DATA: Monthly Staffing Report

1. BACKGROUND / PURPOSE

Workforce Development 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.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

The variance is caused by an increased APR for Fiscal Year 21-22. Acceptable variance target is expected to be achieved as Power and Water Systems fill positions to their APR levels.

2. ACHIEVEMENTS / MILESTONES MET

- External Hires = 88
- Attrition = 47
- Net New Employees = 41

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

Employment Services will continue to monitor the actual occupied positions against the annual Authorized Personnel Resolution.

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

RESPONSIBLE MANAGER: Rita Khurana-Carwile

REPORTING PERIOD: April, 2022

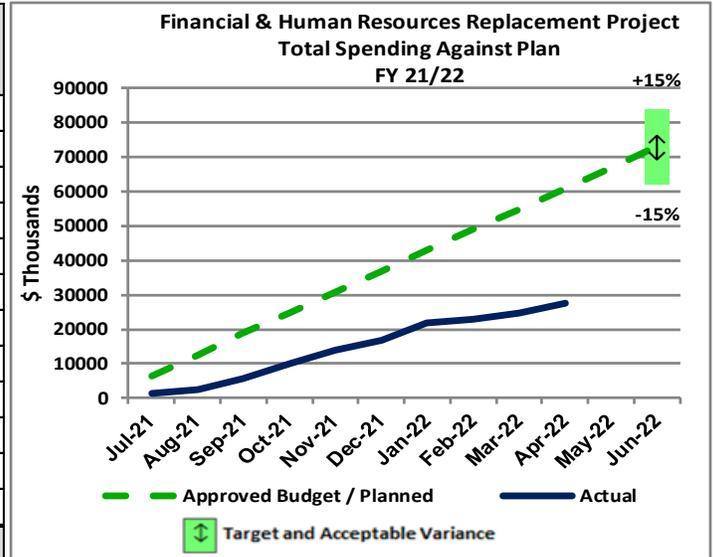
Information Technology Program Management Office

DEFINITION OF RATES METRIC: Board approved annual budget vs. actual expenditures (\$ thousand)

TARGET & ACCEPTABLE VARIANCE (FY 21/22): +/-20% of FY 21/22 Board Approved Budget

STATUS: Outside Acceptable Variance

FYTD as of:	Approved Budget / Planned	Actual	Variance		Re-Estimate (If Applicable)
			Unit or \$	%	
Jul-21	6,250.3	1,257.1	-4993	-79.9%	
Aug-21	12,500.6	2,529.8	-9971	-79.8%	
Sep-21	18,831.3	5,668.7	-13163	-69.9%	
Oct-21	24,841.1	9,837.1	-15004	-60.4%	
Nov-21	30,850.9	13,985.9	-16865	-54.7%	
Dec-21	36,860.7	16,819.8	-20041	-54.4%	
Jan-22	42,870.5	21,659.9	-21211	-49.5%	
Feb-22	48,880.3	23,015.8	-25865	-52.9%	
Mar-22	54,890.1	24,502.9	-30387	-55.4%	
Apr-22	60,899.9	27,448.9	-33451	-54.9%	
May-22	66,909.7				
Jun-22	72,988.9				
Acceptable Variance			± 15%		



SOURCE OF DATA: FI 29401 and 28189

1. BACKGROUND/PURPOSE

- This Software as a Service (SaaS) Project established the Department's (Dept.) integrated Enterprise Resource Planning (ERP) Program consisting of Financial, Payroll and Human Resources Management
 - Procurement was removed from the ERP project in October 2020 due to Workday ERP SaaS limitations. Procurement will deploy Ivalua, also SaaS, & integrate it to ERP
- The ERP program is an enterprise-level initiative to enable the Dept. to update/improve its business processes & support its strategic goals by migrating/replacing outdated technologies & platforms to an integrated & sustainable set of modern, robust & easy-to-use Software (SW) solutions.
- To establish the ERP project, the Dept. engaged in a two-stage procurement process:
 - Stage One: Request for Qualification for best fit SW: "Workday" was selected
 - Stage Two: Piggybacked off City of LA System Integrator (SI) contract with Workday

- March 9, 2021: ERP Contract Negotiations & Statement of Work Development Concludes
- April 15, 2021: ERP Project Kicked-Off
- March 24, 2022: ERP HR/Payroll Planning Stage Completion

3. PERFORMANCE/VARIANCE ANALYSIS & YEAR END PROJECTION

- Project progress was temporarily delayed while the Dept. reprioritized critical projects & hired needed resources
- ERP labor expenditures were below approved budgets as hiring for additional positions continues
- Planning Stage sign-off was delayed pending final review of deliverables. Signed off March 24, 2022
- Financial Management Module, Job Z4905, started however it will be underspent the rest of the fiscal year (Budget plan vs actual Project Plan are not currently matched)
- Procurement Ivalua Module, Job Z2358, will also be underspent the rest of the fiscal year as some parts of that project are delayed due to Occupational Change Management (OCM) Scope (misalignment), design and need for clarifications to the project schedule. These areas are expected to be corrected with a new estimated go-live date of end of summer 2022 for Phase I

2. ACHIEVEMENTS/MILESTONES MET

- June 22 to July 9, 2020: Shortlist Demo & Interviews conducted
- July 29, 2020: Workday SaaS Selected
- September, 2020: Determination to piggyback on the City of LA's SI contract and open negotiations with Workday for statement of work/contract development

4. MITIGATION PLAN AND/OR RECOMMENDATIONS

Within Acceptable Variance Outside Acceptable Variance Exceeds Target Needs Attention

- Decision to piggyback on City of LA's SI contract, rather than put out a Request for Proposal, was made to speed up deployment of ERP Modules due to pending retirement of key staff & all current modules risk of failure. Failure of any of these legacy systems would have significant impact on LADWP operations
- Continue proceeding with achieving ERP Program milestones by utilizing tools that enable remote access, such as WebEx, in lieu of face to face meetings. Use of these tools enable the project to continue due to continuing telecommuting by all project members (including Workday staff)
- Finalization of HCM/Payroll Plan Stage was delayed however Architect Stage activities proceeded; No impact to the overall critical path of the project
- Project expenditures continue as milestones are achieved
- Financial Management (Job Z4905) and Procurement Module (Job Z2358) will both be re-estimated to come into line with projected spending. Procurement module spending expected to trend up the last quarter of the fiscal year after the build phase is completed

Note: Ivalua Procurement Module deployment expenses continue to be charged to the ERP Project

R Carlie

6/14/2022

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

RESPONSIBLE MANAGER: Rita Khurana-Carwile
Information Technology Program Management Office

REPORTING PERIOD: April 2022

DEFINITION OF RATES METRIC: FS & HRMS Project Milestones vs. Compliance Deadlines

TARGET & ACCEPTABLE VARIANCE (FY 21/22): N/A

STATUS **Information Only**

Milestone/Deadline Description	Planned	Actual
ERP Draft RFQ Released to Steering Committee for Review	October 4, 2019	October 4, 2019
ERP RFQ Draft approved by the LADWP General Manager	October, 2019	October 23, 2019
ERP RFQ Draft approved by the Steering Committee	October, 2019	October 30, 2019
ERP Software (SW) RFQ Released	November 19, 2019	November 19, 2019
ERP SW Bidders' Conference	December 4, 2019	December 4, 2019
ERP SW RFQ Responses Due	January 14, 2020	January 14, 2020
Response Evaluation & Demos	April, 2020	June 22-July 9, 2020
ERP Software Selection Made	May, 2020	July 2020
Decision to piggyback on City of LA's System Integrator contract made	September 2020	September 2020
ERP Contract Negotiations & Statement of Work Development	February, 2021	March 9, 2021
ERP Project Kick-Off	April 2021	April 15, 2021
ERP HR/Payroll Planning Stage Completion	September 2021	March 24, 2022
ERP HR/Payroll Architect Stage Completion	April 2022	
ERP HR/Payroll Configure and Prototype Stage Completion	December 2022	
ERP HR/Payroll Testing Stage Completion	October 2023	
ERP Deployment of HR and Payroll Modules (Phase I)	January, 2024	
ERP Financials Planning Stage Completion	May, 2022	
ERP Financials Architect Stage Completion	January, 2023	
ERP Financials Configure and Prototype Stage Completion	August, 2023	
ERP Financials Testing Stage Completion	April, 2024	
ERP Deploy of Financials Module (Phase II)	July, 2024	

SOURCE OF DATA: FI 29401 and 28189

1. BACKGROUND/PURPOSE

- This Software as a Service (SaaS) Project established the Department's (Dept.) integrated Enterprise Resource Planning (ERP) Program consisting of Financial, Payroll and Human Resources Management
 - Procurement was removed from the ERP project in October 2020 due to Workday ERP SaaS limitations. Procurement will deploy Ivalua, also SaaS, & integrate it to ERP
- The ERP program is an enterprise-level initiative to enable the Dept. to update/improve its business processes & support its strategic goals by migrating/replacing outdated technologies & platforms to an integrated & sustainable set of modern, robust & easy-to-use Software (SW) solutions.
- To establish the ERP project, the Dept. engaged in a two-stage procurement process:
 - Stage One: Request for Qualification for best fit SW: "Workday" was selected
 - Stage Two: Piggybacked off City of LA System Integrator (SI) contract with Workday

2. ACHIEVEMENTS/MILESTONES MET

- June 22 to July 9, 2020: Shortlist Demo & Interviews conducted

- July 29, 2020: Workday SaaS Selected
- September, 2020: Determination to piggyback on the City of LA's SI contract and open negotiations with Workday for statement of work/contract development
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- April 15, 2021: ERP Project Kicked-Off
- March 24, 2022: ERP HR/Payroll Planning Stage Completion

3. PERFORMANCE/VARIANCE ANALYSIS & YEAR END PROJECTION

- Project progress was temporarily delayed while the Dept. reprioritized critical projects & hired needed resources
- ERP labor expenditures were below approved budgets as hiring for additional positions continues
- Planning Stage sign-off was delayed pending final review of deliverables

4. MITIGATION PLAN AND/OR RECOMMENDATIONS

- Decision to piggyback on City of LA's SI contract, rather than put out a Request for Proposal, was made

Within Acceptable Variance Outside Acceptable Variance Exceeds Target Needs Attention

to speed up deployment of ERP Modules due to pending retirement of key staff & all current modules risk of failure. Failure of any of these legacy systems would have significant impact on LADWP operations

- Continue proceeding with achieving ERP Program milestones by utilizing tools that enable remote access, such as WebEx, in lieu of face to face meetings. Use of these tools enable the project to continue due to continuing telecommuting by all project members (including Workday staff)
- Finalization of HCM/Payroll Plan Stage was delayed however Architect Stage activities proceeded; No impact to the overall critical path of the project

Note: Ivalua SaaS deployment expenses continue to be charged to the ERP Project

R Carule

6/14/2022

LADWP RATES METRIC – *Cyber Security Capital Projects (Joint)*

RESPONSIBLE MANAGER: Stephen Kwok *Stephen Kwok*

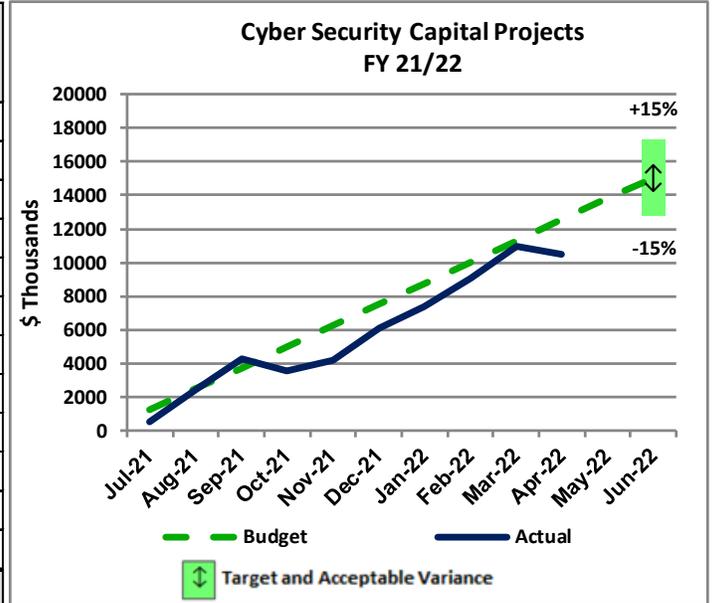
REPORTING PERIOD: April 2022

DEFINITION OF RATES METRIC: Board Approved Annual Budget vs. Actual Expenditures

TARGET & ACCEPTABLE VARIANCE (FY 21/22): FY 21/22 Board Approved Budget (+/- 15%)

STATUS: Outside Acceptable Variance

FYTD as of:	Budget	Actual	Variance		Re-Estimate (If Applicable)
			Unit or \$	%	
Jul-21	1254	553.8	-700	-55.8%	
Aug-21	2508	2452.9	-55	-2.2%	
Sep-21	3763	4295.6	533	14.2%	
Oct-21	5017	3605.3	-1411	-28.1%	
Nov-21	6271	4207.6	-2063	-32.9%	
Dec-21	7525	6096	-1429	-19.0%	
Jan-22	8779	7408.5	-1371	-15.6%	
Feb-22	10033	9028.6	-1005	-10.0%	
Mar-22	11288	11007.2	-280	-2.5%	
Apr-22	12542	10492.9	-2049	-16.3%	
May-22	13796				
Jun-22	15050				
Acceptable Variance			± 15%		



SOURCE OF DATA: FI 28870

1. BACKGROUND / PURPOSE

Cybersecurity threat landscape continue to evolve rapidly, especially with the adoption of cloud. Enterprise Cyber Security is engaging in a number of initiatives to enhance and re-engineer LADWP’s cybersecurity systems and processes to meet business needs and address potential cyber threats.

2. ACHIEVEMENTS / MILESTONES MET

- Issued a number of new Cyber Security Task Orders against the Cyber Security Bench Contract and working with vendors.
- Increased cyber collaboration between the three Systems, and engagement of a Subject Matter Expert to enhance cyber posture.
- Established additional business workflow processes within the new Cyber Governance, Risk, and Compliance system addressing business needs.

- Tuning and enhancement of security features within a number of LADWP’s cyber defenses.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

Labor cost for Cyber Bench related work are capital since they are new initiatives, as are materials and professional support expenditures associated with them. Cost will transition to O&M for future years. A number of invoices are also still outstanding due to minor billing related issues which are actively being addressed.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

We will continue to monitor and work with both Supply Chain Services and Accounts Payable to address billing related issues, and will re-estimate the budget as needed.

LADWP RATES METRIC – Customer Information System Upgrades (Joint)

RESPONSIBLE MANAGER: Annamae Peji *AP*

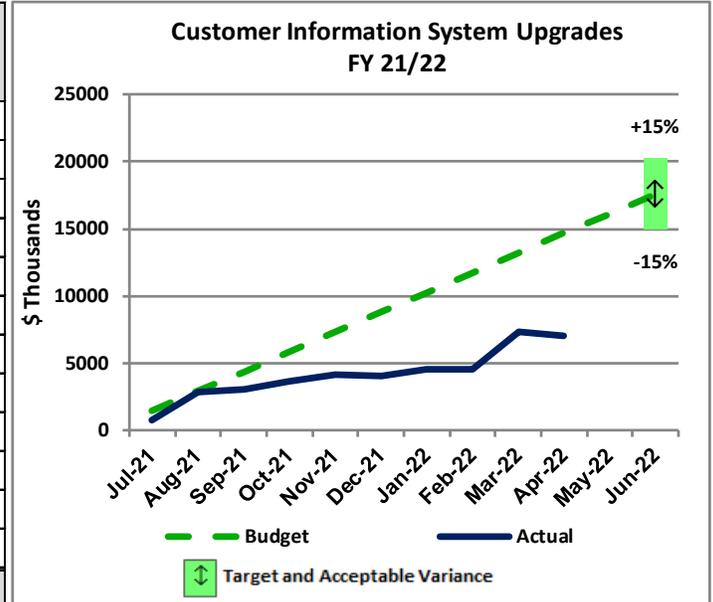
REPORTING PERIOD: April 2022

DEFINITION OF RATES METRIC: Board Approved Annual Budget vs. Actual Expenditures

TARGET & ACCEPTABLE VARIANCE (FY 21/22): FY 21/22 Board Approved Budget (+/- 15%)

STATUS: Outside Acceptable Variance

FYTD as of:	Budget	Actual	Variance		Re-Estimate (If Applicable)
			Unit or \$	%	
Jul-21	1467	784.8	-682	-46.5%	
Aug-21	2933	2888.3	-45	-1.5%	
Sep-21	4400	3114.7	-1285	-29.2%	
Oct-21	5867	3637.9	-2229	-38.0%	
Nov-21	7334	4205.4	-3128	-42.7%	
Dec-21	8800	4039.6	-4761	-54.1%	
Jan-22	10267	4536.7	-5730	-55.8%	
Feb-22	11734	4602.5	-7131	-60.8%	
Mar-22	13200	7316.4	-5884	-44.6%	
Apr-22	14667	7013.5	-7654	-52.2%	
May-22	16134				
Jun-22	17600				
Acceptable Variance			± 15%		



SOURCE OF DATA: FI 28915

1. BACKGROUND / PURPOSE

The Customer Information System supports the LADWP’s customer billing functions and consists of; Customer Care and Billing (CC&B), Mobile Workforce Management (MWM), Meter Data Management (MDM), integration applications supporting over 50 interfaces with external systems, Field Collection System (FCS) and Bill and Letter print formatting. CIS will be upgraded and enhanced to improve efficiencies and provide new functionality in support of the Department’s objectives.

2. ACHIEVEMENTS / MILESTONES MET

- Non-Billed Budget (NBB) level pay program implementation. Functional Testing phase is in progress but encountered some delays. Organizational Readiness tasks are in progress.

- Low Income Household Water Assistance Program (LIHWAP) implementation. Analysis and Requirements Gathering phase began.
- End of Moratorium on Service Disconnection implementation. Completed End to End testing but additional requirements were provided. Analysis and design phases are re-initiated.
- Meter Data Management (MDM) upgrade to support Distributed Automation (DA) project. User Acceptance Testing planning is initiated. Continue with discussions on Integration designs with (DA) headend system.
- Completed End to End Testing phase of California Water and Wastewater Arrearage Payment Program (CWWAPP, Wastewater portion) implementation which intends to apply over \$55M in credits to customer accounts for their sewer arrears. Deployment planning is initiated.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

Labor costs are being charged to operations work orders for the reporting period and should transition to CIS enhancements and upgrades as build and testing phases for various capital projects are progressed. Also, labor costs are lower due to delays in hiring activity to fill vacant positions. Professional services costs are lower due to delays encountered in the submission of a number of invoices by the vendors.

In addition, there are also delays in the purchase of software needed to support AMI and implementation of related technology.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

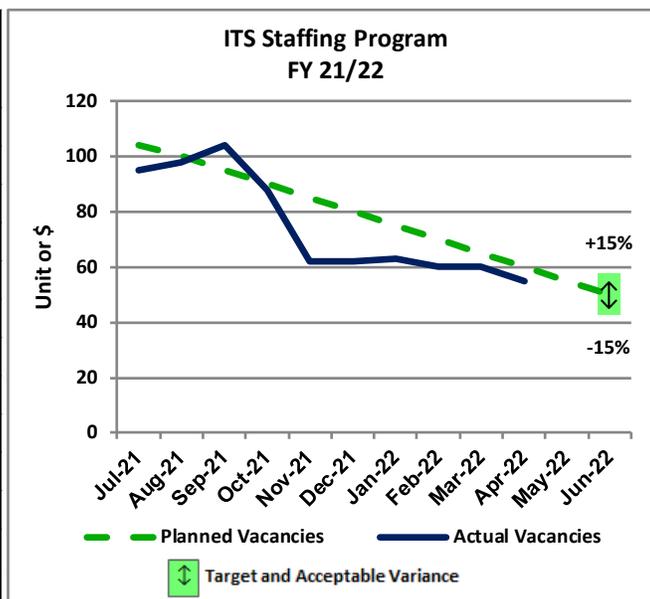
Planned purchase of software is delayed to next FY. The FI has been re-estimated.

Improvements to the invoice submission procedures by the vendors are being addressed. Additionally, staff has been reminded to use appropriate work orders when charging labor costs.

LADWP RATES METRIC – Information Technology Services (ITS) Staffing Program (Joint)


RESPONSIBLE MANAGER: Mark S. Northrup / Analee Klee
REPORTING PERIOD: April 2022
DEFINITION OF RATES METRIC: Number of Full Time Equivalents (FTEs) for ITS employed as compared to plan
TARGET & ACCEPTABLE VARIANCE (FY 21/22): Vacant budgeted ITS positions at 50 vacancies or less by the end of the fiscal year (+/- 15%)
STATUS: Within Acceptable Variance

FYTD as of:	Planned Vacancies	Actual Vacancies	Variance		Re-Estimate (If Applicable)
			Vacancies	%	
Jul-21	104	95	-9	-8.7%	
Aug-21	100	98	-2	-2.0%	
Sep-21	95	104	9	9.5%	
Oct-21	90	88	-2	-2.2%	
Nov-21	85	62	-23	-27.1%	
Dec-21	80	62	-18	-22.5%	
Jan-22	75	63	-12	-16.0%	
Feb-22	70	60	-10	-14.3%	
Mar-22	65	60	-5	-7.7%	
Apr-22	60	55	-5	-8.3%	
May-22	55				
Jun-22	50				
Acceptable Variance			± 15%		


SOURCE OF DATA: Hiring Plan/Annual Personnel Resolution and LADWP Monthly Staffing Report

1. BACKGROUND / PURPOSE

Ensure that Information Technology Services Division (ITSD) hires enough resources to provide support for existing and future IT-related projects across LADWP.

2. ACHIEVEMENTS / MILESTONES MET

Year to date, ITS has a net new employee count of 60 notwithstanding attrition associated with retirement and voluntary separation from service.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

ITSD is projected to meet or exceed the target FTE count.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

ITSD will continue with its mass hiring strategy for entry level positions, and will pursue to effectuate changes (with Human Resources Division's assistance) to the certification list for targeted critical Civil Service classes in order to access Open list candidates.

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

RESPONSIBLE MANAGER: LADWP Senior Management

REPORTING PERIOD: April 2022

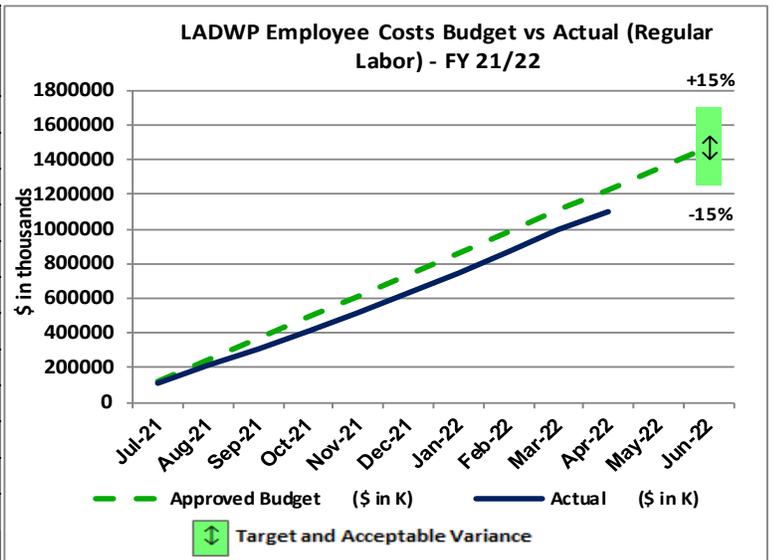
DEFINITION OF RATES METRIC: LADWP employee costs (including regular labor, overtime, pension and healthcare, excluding daily exempt and Utility Pre-Craft Trainee) budget vs. actual (\$ in thousands)

TARGET & ACCEPTABLE VARIANCE (FY 21/22): +/- 15%

SOURCE OF DATA: ORACLE (HPBUDGET) - Rates Metrics Report

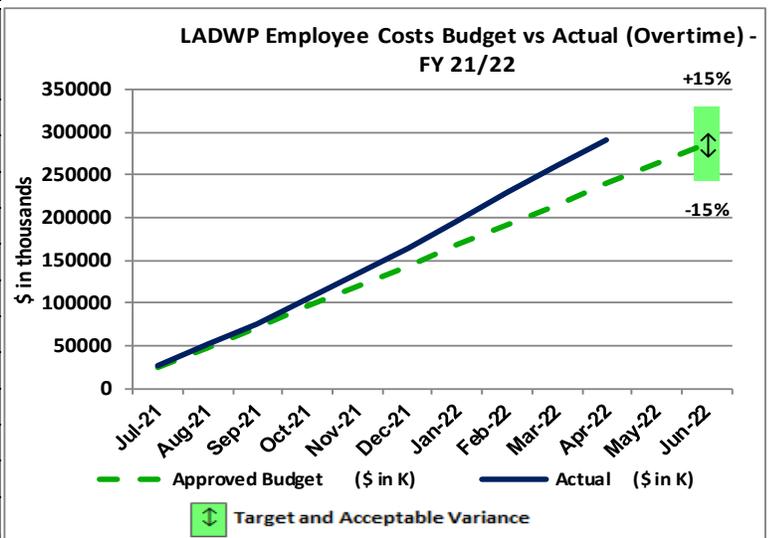
REGULAR LABOR STATUS: **Within Acceptable Variance**

FYTD as of:	Approved Budget (\$ in K)	Actual (\$ in K)	Variance		Re-Estimate (If Applicable)
			\$ in K	%	
Jul-21	122,954	106,644	-16,310	-13.3%	
Aug-21	245,909	213,313	-32,596	-13.3%	
Sep-21	368,863	312,845	-56,018	-15.2%	
Oct-21	491,818	413,185	-78,633	-16.0%	
Nov-21	614,772	518,633	-96,139	-15.6%	
Dec-21	737,727	628,585	-109,142	-14.8%	
Jan-22	860,681	747,091	-113,590	-13.2%	
Feb-22	983,635	872,898	-110,737	-11.3%	
Mar-22	1,106,590	994,080	-112,510	-10.2%	
Apr-22	1,229,544	1,097,653	-131,891	-10.7%	
May-22	1,352,499				
Jun-22	1,475,453				
Acceptable Variance			± 15%		



OVERTIME STATUS: **Outside Acceptable Variance**

FYTD as of:	Approved Budget (\$ in K)	Actual (\$ in K)	Variance		Re-Estimate (If Applicable)
			\$ in K	%	
Jul-21	23,913	26,481	2,568	10.7%	
Aug-21	47,827	52,010	4,183	8.7%	
Sep-21	71,740	75,505	3,765	5.2%	
Oct-21	95,654	104,049	8,395	8.8%	
Nov-21	119,567	133,526	13,959	11.7%	
Dec-21	143,481	164,143	20,663	14.4%	
Jan-22	167,394	195,482	28,088	16.8%	
Feb-22	191,307	229,206	37,899	19.8%	
Mar-22	215,221	260,322	45,101	21.0%	
Apr-22	239,134	289,854	50,720	21.2%	
May-22	263,048				
Jun-22	286,961				
Acceptable Variance			± 15%		



YTD as of April 2022					
Employee Cost Category	Budget (\$ in K)	Actual (\$ in K)	Var (\$ in K)	Variance %	FY 21/22 Approved
Regular Labor	1,229,544	1,097,653	-131,891	-10.7%	1,475,453
Overtime	239,134	289,854	50,720	21.2%	286,961
Regular Labor + Overtime	1,468,678	1,387,507	-81,171	-5.5%	1,762,414
Health Care Allocation	335,277	297,684	-37,593	-11.2%	402,332
Retirement & Death Benefit	363,183	312,811	-50,372	-13.9%	435,820
Total	2,167,138	1,998,002	-169,136	-7.8%	2,600,566

Within Acceptable Variance █ Outside Acceptable Variance █ Exceeds Target █ Needs Attention █

LADWP RATES METRIC – Total Number of Water Distribution Employees per Water Customer Meter (Water)

RESPONSIBLE MANAGER: Corporate Performance

REPORTING PERIOD: April 2022

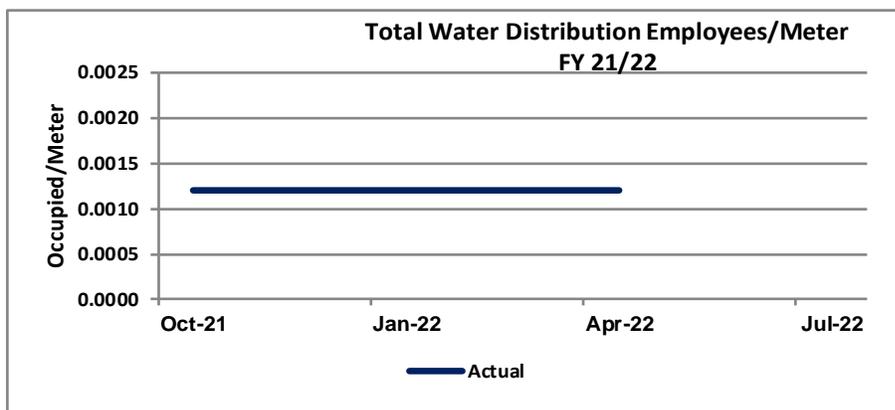
DEFINITION OF RATES METRIC: Total number of water distribution employees (excluding daily exempt and utility pre-craft trainees) per water customer meters

TARGET & ACCEPTABLE VARIANCE (FY 21/22): No Target

STATUS:

Information Only

FYTD as of:	Actual
Oct-21	0.0012
Jan-22	0.0012
Apr-22	0.0012
Jun-22	



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

1. BACKGROUND / PURPOSE

On August 20 2021, the Board of Water and Power Commissioners approved Resolution 022040 adding the Total Number of Water Distribution Employees per Water Customer Meter metric to the LADWP Rates Metrics. This metric measures the total number of water distribution employees (excluding daily exempt and utility pre-craft trainees) per water customer meter. This metric does not have a target and is provided as Information Only.

2. ACHIEVEMENTS / MILESTONES MET

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

Data for the Total Number of Water 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 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 meters cannot be obtained for past dates and times.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

Total Number of Water Distribution Employees (excluding daily exempt and utility pre-craft trainees) as of April 2022 = 875

	10/21	01/22	04/22	06/22
Water	880	877	875	

Total Number of Water Meters as of April 2022 = 712,941

	10/21	01/22	04/22	06/22
Water	712,246	712,528	712,941	

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

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

Within Acceptable Variance ■ Outside Acceptable Variance ■ Exceeds Target ■ Needs Attention ■

LADWP RATES METRIC – *Total Number of Power Distribution Employees per Power Customer Meter (Power)*

RESPONSIBLE MANAGER: Corporate Performance

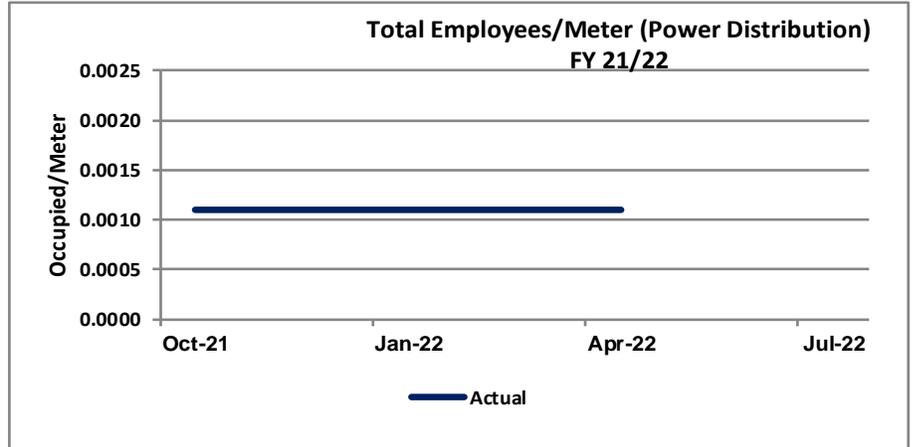
REPORTING PERIOD: April 2022

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

TARGET & ACCEPTABLE VARIANCE (FY 21/22): No Target

STATUS: Information Only

FYTD as of:	Actual
Oct-21	0.0011
Jan-22	0.0011
Apr-22	0.0011
Jun-22	



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

1. BACKGROUND / PURPOSE

On August 20 2021, the Board of Water and Power Commissioners approved Resolution 022040 adding the Total Number of Power Distribution Employees per Power Customer Meter metric to the LADWP Rates Metrics. This metric measures the total number of power distribution employees (excluding daily exempt and utility pre-craft trainees) per power customer meter. This metric does not have a target and is provided as Information Only.

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 power meters cannot be obtained for past dates and times.

2. ACHIEVEMENTS / MILESTONES MET

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

Data for the Total Number of 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 power meters is point-in-time

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

Total Number of Power Distribution Employees (excluding daily exempt and utility pre-craft trainees) as of April 2022 = 1,752

	10/21	01/22	04/22	06/22
Power	1,757	1,748	1,752	

Total Number of Power Meters as of April 2022 = 1,613,762

	10/21	01/22	04/22	06/22
Power	1,608,813	1,610,906	1,613,762	

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

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

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

RESPONSIBLE MANAGER: Corporate Performance

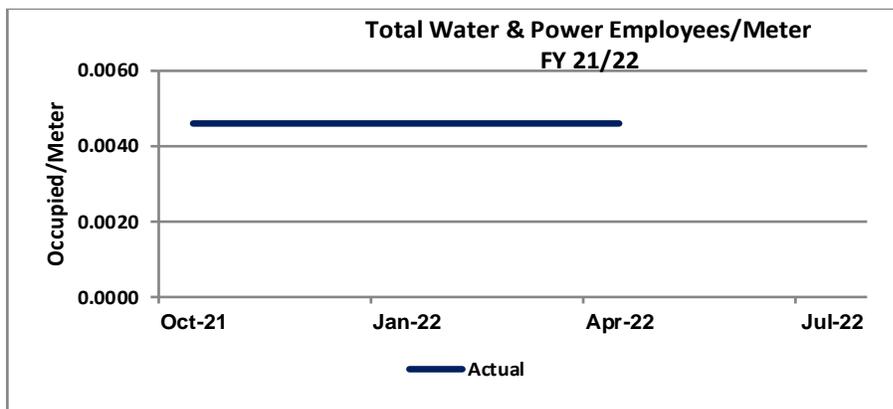
REPORTING PERIOD: April 2022

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 21/22): No Target

STATUS: Information Only

FYTD as of:	Actual
Oct-21	0.0046
Jan-22	0.0046
Apr-22	0.0046
Jun-22	



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 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.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

Total Number of Water and Power Employees (excluding daily exempt and utility pre-craft trainees) as of April 2022 = 10,787

	10/21	01/22	04/22	06/22
Power	5,216	5,236	5,275	
Water	2,177	2,187	2,159	
Joint	3,297	3,329	3,353	
Total	10,690	10,752	10,787	

Total Number of Water and Power Meters as of April 2022 = 2,326,703

	10/21	01/22	04/22	06/22
Power	1,608,813	1,610,906	1,613,762	
Water	712,246	712,528	712,941	
Total	2,321,059	2,323,434	2,326,703	

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

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, Katherine Rubin Katherine Rubin Digitally signed by Katherine Rubin Date: 2022.06.06 11:37:56 -0700 **REPORTING PERIOD:** As of April 2022

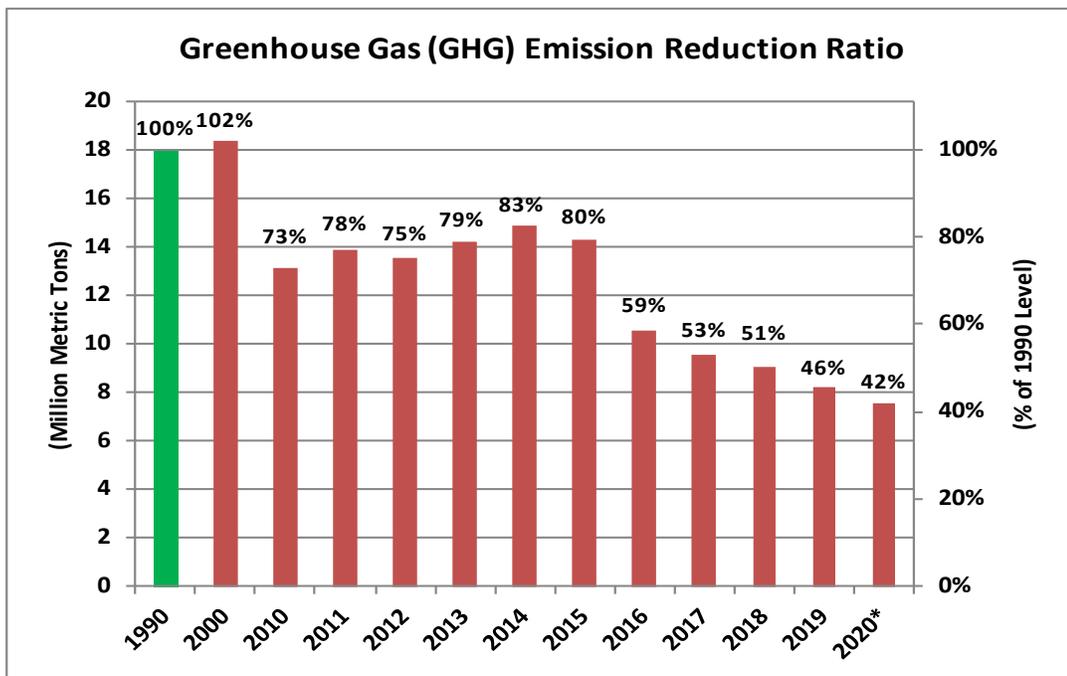
DEFINITION OF RATES METRIC: Current Year GHG Emissions / 1990 GHG Emissions (in million metric tons)

TARGET & ACCEPTABLE VARIANCE (CY 2022): 60% below = 40% of 1990 LADWP GHG emission baseline; Variance + 5%

STATUS: Within Acceptable Variance

Note: CO2 is 99.9% of total GHG emissions. Annual emissions are CO2 only for comparison with the 1990 baseline which is CO2 emissions only (not total GHG).

Historical Trend:		
CY	CO2 Emissions (Metric Tons)	% of 1990 CO2 Emission Level
1990	17,925,410	100%
2000	18,373,127	102%
2010	13,165,764	73%
2011	13,900,590	78%
2012	13,519,339	75%
2013	14,174,036	79%
2014	14,911,781	83%
2015	14,312,947	80%
2016	10,566,904	59%
2017	9,554,640	53%
2018	9,077,848	51%
2019	8,230,332	46%
2020*	7,528,640	42%



*2020 load was lower than normal due to COVID-19 impacts.

SOURCE OF DATA: Internal LADWP GHG emissions inventory based on The Climate Registry voluntary reporting protocol, CARB GHG emission reports and Power Source Disclosure/Power Content Label data.

1. BACKGROUND / PURPOSE

- The State of California has set goals to reduce GHG emissions to 1990 levels by 2020, 40% below 1990 by 2030, and 80% below 1990 by 2050. GHG reduction efforts from the electricity sector, including LADWP, are a critical component in meeting these statewide goals.
- California Senate Bill 100 (De Leon, 2018) set a target to supply end-use customers with 60 percent renewable energy by 2030, and 100% zero-carbon electricity by 2045.
- California Governor Jerry Brown signed Executive Order B-55-18 setting a goal for California to achieve carbon neutrality by 2045.

2. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- No variance explanation needed.

3. LADWP ACHIEVEMENTS / MILESTONES

- Early divestiture of Navajo Generating Station effective July 1, 2016.
- Beginning January 1, 2016, LADWP incorporated carbon cost into the economic dispatch of its generating units, which prioritized use of zero GHG and natural gas over coal resources.
- LADWP's electricity supply in 2020 included 36.7% renewable energy based on LADWP's 2020 Power Content Label.
- LADWP's 2020 emissions are 58% below its 1990 emissions baseline. 2020 load was lower than normal due to COVID-19 impacts.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

- No mitigation needed. GHG emissions have been significantly reduced as a result of the measures listed under #3.

LADWP RATES METRIC – Energy Savings Variance Report (Joint)

RESPONSIBLE MANAGER: David Jacot

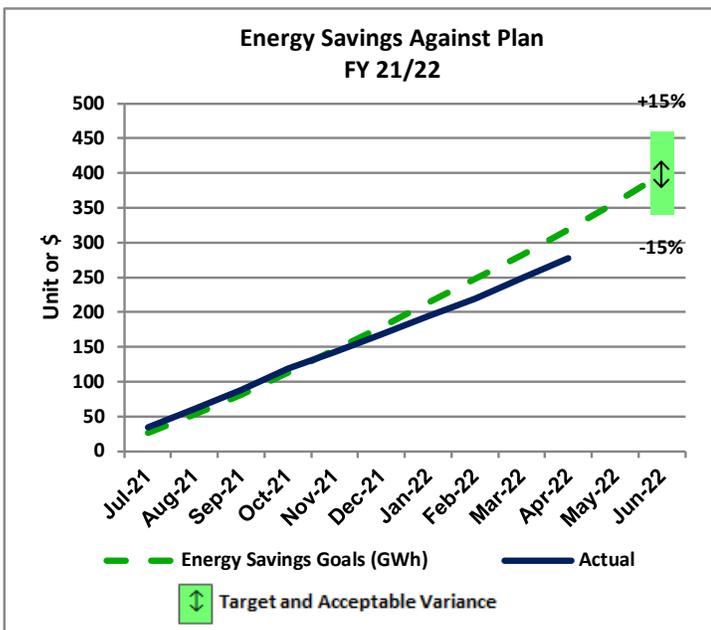
REPORTING PERIOD: April 2022

DEFINITION OF RATES METRIC: Energy Savings Against Plan

TARGET & ACCEPTABLE VARIANCE (FY 21/22): GWh Installed Compared to the 2020 baseline/GWh for all customers. 15%

STATUS: Within Acceptable Variance

FYTD as of:	Energy Savings Goals (GWh)	Actual	Variance		Re-Estimate (If Applicable)
			Unit or \$	%	
Jul-21	26.3	34.2	8	30.0%	
Aug-21	52.6	60.9	8	15.8%	
Sep-21	81.0	88.1	7	8.8%	
Oct-21	113.5	118.4	5	4.3%	
Nov-21	146.1	143.3	-3	-1.9%	
Dec-21	178.6	168.0	-11	-5.9%	
Jan-22	213.3	194.5	-19	-8.8%	
Feb-22	247.9	219.3	-29	-11.5%	
Mar-22	282.5	249.3	-33	-11.8%	
Apr-22	319.2	278.0	-41	-12.9%	
May-22	358.0				
Jun-22	398.9				
Acceptable Variance			± 15%		



SOURCE OF DATA: Efficiency Solutions KPI FY 20-21 Report

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

The Efficiency Solutions Division achieved 300.3 GWh energy savings in FY 20-21, or 83% of the FY target, despite COVID-19 and the “Safer At Home” mandate. Major contributors to the FY 20-21 total energy savings are the Commercial Lighting Incentive Program, Custom Performance Program, Consumer Rebate Program and

LAUSD Direct Install energy efficiency programs. For FY 21-22, energy efficiency program activities will continue to ramp up and will be at or close to the energy savings target by FY-end.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

Total energy savings as of April 2022 is 278 GWh, 13% below the fiscal year-to-date energy savings target as energy savings program ramp up after a slowdown for over a year due to COVID 19 & “Safer at Home” mandate and due to the more recent increase in COVID 19 cases in December 2021 and January 2022.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

Customer site-based Energy Efficiency programs/activities have resumed with safety protocols in place and continues to ramp up.

LADWP RATES METRIC – BUDGET VARIANCE ENERGY EFFICIENCY (JOINT)

RESPONSIBLE MANAGER: David Jacot



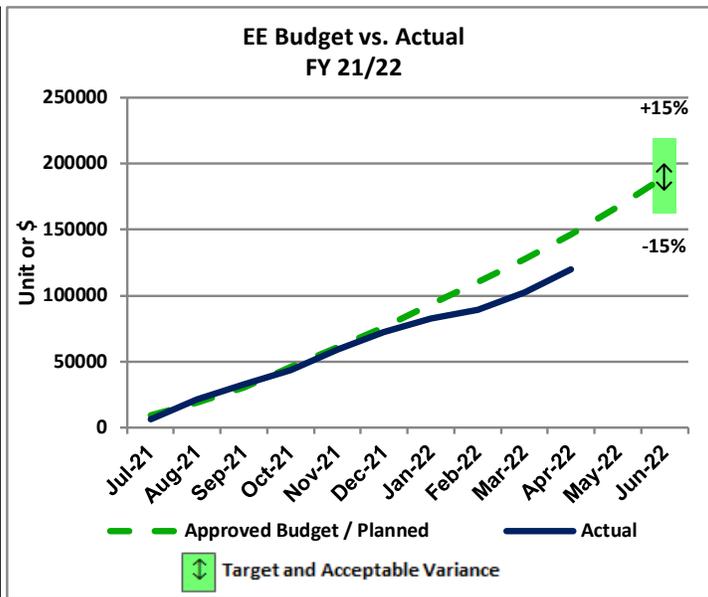
REPORTING PERIOD: April 2022

DEFINITION OF RATES METRIC: Budget vs. Actual for the overall Energy Efficiency Portfolio

TARGET & ACCEPTABLE VARIANCE (FY 21/22): +/- 15%

STATUS: Outside Acceptable Variance

FYTD as of:	Approved Budget / Planned	Actual	Variance		Re-Estimate (If Applicable)
			Unit or \$	%	
Jul-21	9,552	6,250	-3302	-34.6%	
Aug-21	19,103	21,130	2027	10.6%	
Sep-21	30,544	32,616	2072	6.8%	
Oct-21	45,761	43,830	-1931	-4.2%	
Nov-21	60,979	59,369	-1610	-2.6%	
Dec-21	76,197	72,622	-3575	-4.7%	
Jan-22	93,303	82,485	-10818	-11.6%	
Feb-22	110,409	88,925	-21484	-19.5%	
Mar-22	127,516	102,401	-25115	-19.7%	
Apr-22	146,511	119,668	-26843	-18.3%	
May-22	167,394				
Jun-22	190,167				
Acceptable Variance			± 15%		



SOURCE OF DATA: Efficiency Solutions KPI FY 21-22 Report

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 Indicator (KPI) database encompassing measures installed by participants in ES programs and initiatives. A budget is established annually, in support of energy efficiency programs, and actual spending is also compiled monthly into the KPI database, to track spending and energy savings. The OPA has requested this metric be reported to the Board and the OPA on a regular basis, ensuring actual spending meets established targets.

2. ACHIEVEMENTS / MILESTONES MET

Energy efficiency programs have slowly ramped up after the slowdown for over a year due to COVID 19 and the Safer At Home mandate. Expenditures are 18.3% below the budget as of

April 2022 as some energy efficiency programs continue to move forward including the Consumer Rebate Program, Commercial Lighting Incentive Program, and LAUSD Direct Install.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

Energy efficiency program expenditures are 18.3% below target as of April 2022 as programs continue to push forward despite COVID 19.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

Energy Efficiency programs/activities will continue to ramp up and expenditures will continue to increase as we move forward throughout the FY. With the Utility Services Specialist vacant positions currently being filled, support for all energy efficiency programs will be in place to accelerate programs.

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

RESPONSIBLE MANAGER: David Jacot 

REPORTING PERIOD: April 2022

DEFINITION OF RATES METRIC: Cost per kWh over lifetime of installed energy efficiency solutions or measures.

TARGET & ACCEPTABLE VARIANCE (FY 21/22): Annual metric: Levelized Cost \$.0.060 +/- 15%

STATUS Within Acceptable Variance

SOURCE OF DATA: ESP Portfolios Report FY 20/21

1. BACKGROUND / PURPOSE

Efficiency Solutions' (ES) Levelized Energy Efficiency (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 energy efficiency program portfolio is calculated once per year (the most recent is FY 20-21) using the ESP Portfolios (ESP) tool developed by Energy Platforms, LLC 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 20-21 was \$0.0367 per kWh saved resulting in a variance of -39% from the established \$0.060 target.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

LADWP's portfolio of energy efficiency programs has historically been very cost effective, with a levelized cost of \$0.0451, well below the \$0.060 target.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

Customer site-based Energy Efficiency programs/activities have resumed with safety protocols in place.