

INFORMATIONAL BOARD LETTER

ANN M. SANTILLI Chief Financial Officer

MARTIN L. ADAMS General Manager and Chief Engineer

DATE: January 18, 2023

SUBJECT: LADWP Rates Metrics Semi-Annual Report

SUMMARY

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.

RATES METRICS

Rates Metrics 2022-2023 (Fiscal-Year-To-Date October 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 October 2022 performance status of all these metrics is listed in the Rates Metrics Summary (Attachment I).

LADWP Rates M (Fiscal Year to Date)		
Performance Statu	IS	# Metrics
Exceeds Target	Blue	5
Within Acceptable Variance	Green	26
Outside Acceptable Variance	Red	19
Needs Attention	Yellow	0
Information Only	White	9
	Total	59

For the period ending October 2022, 53 percent of the metrics are either within the acceptable variance or exceed the target.

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

Metric	Variance	Explanation
Last signed Power Purchase Agreement (PPA) by Technology (Geothermal)	23.8%	 Actual is above target due to current market trends.
Power System Reliability Program (PSRP) Generation Capital (Budget vs. Actual)	-57.8% (-\$4.1M)	 Cranes at Aqueduct Power Plant are out of order and staff are not able to perform the inspections and overhauls, causing an underrun. Lack of personnel resources to work on Castaic Power Plant electrical and mechanical repair services
PSRP Transmission Capital (Budget vs. Actual)	-48.4% (-\$6.7M)	• Underrun is primarily caused by the in-service date of Toluca-Hollywood Line 1 Upgrade being pushed to 2027. To maintain power system reliability, this circuit cannot be placed out of service and upgrade work cannot be completed as originally scheduled in 2025. As a result, the majority of expenditure will be spent on and after 2024.
PSRP Transmission O&M (Budget vs. Actual)	48.0% (\$4.6M)	 Overrun is primarily due to Overhead Transmission Lines O&M crews working additional overtime to maintain the schedule of changing out polymer insulators to glass insulators on towers in high fire zone areas. Access to these locations is difficult and requires increased use of our helicopter services.
PSRP Substation Capital (Budget vs. Actual)	-19.6% (-\$8.7M)	 Underspending due to lack of Construction and Test Lab resources and competing capital jobs. In addition, due to summer loading conditions and limited outages, circuits were not de- energized to be worked on.

Power System

Metric	Variance	Explanation
Distribution Automation Project (Budget vs. Actual)	-49.6% (-\$4.3M)	 The program initially experienced delays with communication equipment delivery and installations due to late receipt from vendors and global supply chain issues.
		• Supply chain issues continue to be a potential issue in the case of project change orders. Installations have ramped up with addition of new staff to installation crews. A current hold on integrations project/tasks is adding to the variance.

Water System

Metric	Variance	Explanation
Water Supply Costs - Capital (Budget vs. Actual)	-68.1% (\$-25.3M)	 Watershed Stormwater Capture jobs are contributing to the underrun. The Stormwater Capture Parks Program is experiencing delays related to Memorandum of Agreement with Los Angeles Sanitation (LASAN). Water Recycling Capital jobs are contributing to the underrun as there has been a delay in processing invoices for the Harbor Refineries and Harbor Industrial Onsite Improvements projects.
Water Supply Costs – O&M (Budget vs. Actual)	10.9% (\$5.1M)	• The overrun is primarily due to the Water Recycling O&M job related to the Hyperion AWPF construction MOU payments to LASAN. Several invoices for work performed in April and June 2022 were processed this fiscal year.
Aqueduct refurbishment Capital (Budget vs. Actual)	-47.0% (\$-5.4M)	 Aqueduct capital is expected to be slightly below target at fiscal year-end. Several capital projects such as the North Haiwee Dam Project, Grant Lake Roto Valve Project, and Spillway Projects have been postponed due to additional Scope of Work or delays in planning and permitting.
Aqueduct refurbishment O&M (Budget vs. Actual)	15.2% (\$2.9M)	 Aqueduct continues to focus on O&M work as several Capital projects are delayed. Crews have been able to perform substantial O&M and resource management.
Fixed Assets Replacement (Budget vs. Actual)	-13.2% (-\$16.4M)	 There have been delays in receiving and processing invoice payments for Infrastructure Reservoir Improvements and Trunk Line and Major System Connect projects at the beginning of the fiscal year. The Division is working on processing the invoices.
		 Contributing to the underrun is the updating of the design for the Redmont Pump Stations and

Metric	Variance	Explanation
		Replacement Project, which has resulted in construction being pushed out to next fiscal year.
Meter Replacement	-16.2%	• The rate of meter replacement decreased this reporting period as a result of supply chain issues resulting in a meter inventory shortage.
Water Quality O&M (Budget vs. Actual)	-24.8% (-\$12.3M)	 The underrun in Distribution Reservoir O&M is due to delays in obtaining environmental permits for the Van Norman Complex Mitigation Project.
		• The underrun in Filter Plant Operations is due to a gap between a previous and new chemical supply contract during which orders could not be placed.
		 The underrun in Water Quality – Groundwater O&M is due to the timing of invoices received from LASAN for the development of the Hyperion Membrane Bioreactor (MBR) Pilot Project.

Joint System

Metric	Variance	Explanation
Financial and Human Resources Replacement Project (Budget vs. Actual)	-59.1% (\$-19.3M)	 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)	-65.0% (\$-3.9M)	• A number of invoices (totaling \$2.1M) continue to be outstanding due to billing and contract amendment related issues which are actively being addressed with the vendor.
Customer Information System (CIS) Upgrades (Budget vs. Actual)	-38.6% (-\$2.2M)	• Labor costs are lower due to delays in hiring activity to fill vacant positions. Lower labor costs are also related to the delays with the kickoff of some capital project initiatives such has Water Trouble Work Management system replacement and AMI.
Information Technology Services (ITS) Staffing Program	21.1%	Hiring has been partially affected by delays in the refresh of critical Civil Service lists ITS has exhausted.
Energy Savings Against Plan	-19.9%	 Energy efficiency program activities will increase in FY22-23 with Home Energy Improvement Program (HEIP) having resumed field assessments and installation work in mid-September 2022.

Metric	Variance	Explanation
Energy Efficiency Portfolio (Budget vs. Actual)	-23.1% (-\$13.3M)	• Energy Efficiency Programs have slowly ramped up after some programs resumed in June 2021. The HEIP resumed field assessments and installation work in mid-September 2022.

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

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

Rates Metrics Fiscal Year 2021-2022

The Rates Metrics for Fiscal Year 2021-2022 included 16 for Water System, 29 for Power System, and 14 for Joint System. A summary of the fiscal-year-to-date June 2022 performance status of all these metrics is listed in the Rates Metrics Summary (Attachment II).

LADWP Rates Metrics Status (Fiscal Year to Date June 2022)		
Performance Stat	# Metrics	
Exceeds Target	Blue	5
Within Acceptable Variance	Green	30
Outside Acceptable Variance	Red	15
Needs Attention	Yellow	1
Information Only	White	8
	Total	59

For the period ending June 2022, 59 percent of the metrics are either within the acceptable variance or exceeds the target. Achievements highlighted in the metrics include:

Power System

- Met Renewable Portfolio Standard goals and spending targets for wind, solar and geothermal.
- Met Power System Reliability Program asset replacement targets for distribution assets (transformers, poles, crossarms, and cable).

Water System

- Met target for level of water conservation in gallons per capita per day (GPCD).
- Met asset replacement goals for mainline, trunk line, and meter replacement.

Fifteen of the fifty-nine Rates Metrics are outside the acceptable variance. Explanations for metrics remaining outside the acceptable variance at the end of the fiscal year include:

Power System

Metric	Variance	Explanation
Average cost of training per Electrical Mechanic Trainee (EMT)	54.7%	• The actual cost per trainee this month is higher compared to May due to increased spending in Classroom training and increased allocations.
Number of Full-time equivalents for Power Distribution Field Positions	40.0%	 The vacancy overrun is due to majority of vacancies being held for employees on emergency appointments, specials assignments, probation or temporary assignments. Hiring delays and attrition in Electric Distribution Mechanic (EDM), Electrical Craft Helper (ECH) and Line Maintenance Assistant (LMA).There is no eligible list for LMA and the exam is scheduled for July 2022.
Power System Reliability Program (PSRP) Generation Capital (Budget vs. Actual)	-18.8% (-\$4.3M)	 Cranes at Aqueduct Power Plant are out of order and staff are not able to perform the inspections and overhauls, causing the underrun.
PSRP Transmission Capital (Budget vs. Actual)	51.4% (\$31.9M)	 Scattergood-Olympic Cable B scope was changed to construct Scattergood-Olympic Cable B, from the original scope of creating Scattergood-Pershing Cable B and Pershing- Olympic Cable B after Receiving Station X is ready to intercept this circuit.
PSRP Substation Capital (Budget vs. Actual)	-21.7% (-\$27.0M)	 Underspending is due to the lack of Construction and Test Lab resources and competing capital jobs.
Distribution Automation Project (Budget vs. Actual)	-33.2% (-\$14.7M)	• The program has experienced delays with installation of the communication equipment and delays with equipment delivery due to late receipt from vendors and global supply chain issues.

Water System

Metric	Variance	Explanation
Number of Full Time Equivalents for Water Distribution field positions	211.6%	• The division continues targeted hiring of field positions to ensure adequate staffing. 81 field positions have been hired in FY 21/22 and netted 3 new field employees; however, due to retirements, internal transfers, promotions, and attrition, the division was not able to reduce the number of field vacancies to meet the target for this fiscal year.
Water Supply Costs - Capital (Budget vs. Actual)	-54.4% (-\$47.0M)	 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. In addition, the Stormwater Capture Parks Program is experiencing delays related to the execution of the implementation of the Memorandum of Agreements with Los Angeles Sanitation (LASAN). Water Conservation Water funded jobs contribute to the underrun due to significant decrease in demand for commercial and residential rebates from customers.
Water Supply Costs – O&M (Budget vs. Actual)	10.1% (\$13M)	• The overrun is primarily due to Hyperion AWPF construction payments to LASAN. Typically, invoices are delayed from LASAN and it was not expected that invoices, totaling \$14M, would be received and processed before the end of the FY.
Aqueduct refurbishment Capital (Budget vs. Actual)	-35.2% (-\$10.7M)	• The underrun is due to several capital projects, such as the North Haiwee Dam Project, being postponed due to delays in planning and permitting, the continued negotiation of the Scope of Work for the Grant Lake Roto Valve Project, and work being rescheduled by Power Construction and Maintenance (PCM) due to Covid-19.

Joint System

Metric	Variance	Explanation
Total FTEs Against Plan	-17.2%	• The variance was caused by an increased APR for Fiscal Year 21-22. Acceptable variance target was expected to be achieved, however Joint, Power and Water Systems did not fill positions to their APR levels. Acceptable variance target has been updated for the new fiscal year.

Metric	Variance	Explanation
Financial and Human Resources Replacement Project (Budget vs. Actual)	-48.3% (-\$35.2M)	 Progress was temporarily delayed while LADWP reprioritized critical projects and hired needed resources. Enterprise Resource Planning (ERP) labor expenditures were below approved budget levels as hiring for additional positions continues.
Customer Information System (CIS) Upgrades (Budget vs. Actual)	-39.9% (-\$7.0M)	 Labor costs are lower due to delays in hiring activity to fill vacant positions. Lower labor costs are also related to the delays with the kickoff of some capital project initiatives such has Water Trouble Work Management system replacement and AMI. In addition, there are also delays in purchase of software needed to support AMI.
Energy Savings Against Plan	-15.3%	 Efficiency Solutions Division achieved 338 GWh energy savings this FY21-22 (15% below target) despite COVID-19.
Energy Efficiency Portfolio (Budget vs. Actual)	-20.3% (-\$38.5M)	• Energy efficiency programs have slowly ramped up after some programs resumed in June 2021. However, other programs have yet to resume, like HEIP and the Comprehensive Affordable Multi-Family Retrofits (CAMR) Program that just launched.

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 2022-2023 Fiscal Year to Date October 2022 (Attachment I)
- LADWP Rates Metrics Summary 2021-2022 Fiscal Year to Date June 2022 (Attachment II)

ATTACHMENT I LADWP Rates Metrics Summary 2022-2023 Fiscal Year To Date (October 2022)

LADWP RATES METRICS SUMMARY

Related Rate Adjustment Factor	Category	#	Board Metric	Definition	FY 22/23 Target	Acceptable Variance	Responsible Manager	October 2022 Performance
	Power System Training Plan		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: \$538.2K	+/- 25%	Brian Williams	-9.5%
Reliability Cost	Power System Training Plan		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	ЕМТ: \$922.6К	+/- 25%	Brian Williams	-31.9%
Adjustment Factor	Power System Training Plan		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: 25	+/- 15%	Brian Williams	7.7%
	Power System Training Plan		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: 41	+/- 15%	Brian Williams	14.8%
None	Power Distribution Staffing Program		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 512 vacancies or less by the end of the fiscal year	+/- 15%	Brian Wilbur	9.6%
	Renewable Portfolio Standard (Owned)	6	Renewable Portfolio Standard (RPS) Percentage (%)	GWh from RPS plants/GWh for all customers (State requirement)	38.50% for Calendar Year 2022 41.25% for Calendar Year 2023	+/- 3% of each canlendar year's goal toward state law mandates	Steven Pruett	NA
	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	6.5%
Energy Cost Adjustment Factor	Renewable Portfolio Standard (Owned)	8	Total RPS cost (\$/MWh) vs. plan, by technology (Solar)		Solar: \$71.93/MWh	+ 15%	Marlon Santa Cruz	0.2%
Aujustment Factor	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: \$80.46/MWh	+ 15%	Marlon Santa Cruz	-3.6%
	Renewable Portfolio Standard (Owned)	10	Last signed power purchase agreement (PPA) (\$/MWh) by technology (Wind)	Last signed PPA (\$/MWh) by technology (Wind)	Wind: \$35.00/MWh	+30%	Marlon Santa Cruz	-27.1%
	Renewable Portfolio Standard (Owned)	11	Last signed PPA (\$/MWh) by technology (Solar)	Last signed PPA (\$/MWh) by technology (Solar)	Solar: \$35.00/MWh	+15%	Marlon Santa Cruz	-43.8%
	Renewable Portfolio Standard (Owned)	12	Last signed PPA (\$/MWh) by technology (Geothermal)	Last signed PPA (\$/MWh) by technology (Geothermal)	Geothermal: \$61.00/MWh	+15%	Marlon Santa Cruz	23.8%

Related Rate Adjustment Factor	Category	#	Board Metric	Definition	FY 22/23 Target	Acceptable Variance	Responsible Manager	October 2022 Performance
	Power System Reliability Program (Generation)		Budget vs. actual (\$M) for capital in the Generation budget	Board Approved Annual Budget vs. Actual expenditures	FY22/23 Board Approved Budget - May 2022	+/- 15%	Robert Fick	-57.8%
	Power System Reliability		Budget vs. actual (\$M) for capital included in the Transmission budget	Board Approved Annual Budget vs. Actual expenditures	FY22/23 Board Approved Budget - May 2022	+/- 15%	Pjoy Chua	-48.4%
	Program (Transmission)		Budget vs. actual (\$M) for O&M expenses included in the Transmission budget	Board Approved Annual Budget vs. Actual expenditures	FY22/23 Board Approved Budget - May 2022	+/- 15%	Ruben Hauser	48.0%
	Power System Reliability	16	Budget vs. actual (\$M) for capital in the Substation budget	Board Approved Annual Budget vs. Actual expenditures	FY22/23 Board Approved Budget - May 2022	+/- 15%	Tesfaye Zeleke	-19.6%
	Program (Substation)		Budget vs. actual (\$M) for O&M expenses in the Substation budget	Board Approved Annual Budget vs. Actual expenditures	FY22/23 Board Approved Budget - May 2022	+/- 15%	Jonathan Fonti	4.5%
	Dower System Deliability		Budget vs. actual (\$M) for capital in the Distribution budget	Board Approved Annual Budget vs. Actual expenditures	FY22/23 Board Approved Budget - May 2022	+/- 15%	Vincent Zabukovec	9.1%
	Power System Reliability Program (Distribution)	19	Budget vs. actual (\$M) for O&M expenses in the Distribution budget	Board Approved Annual Budget vs. Actual expenditures	FY22/23 Board Approved Budget - May 2022	+/- 15%	Ruben Hauser	14.3%
Reliability Cost Adjustment Factor			Number of fixed assets replaced against plan for critical Distribution assets (Transformers)	Numbers of transformers replaced against plan	Transformer: 1,150	+/- 15%	Ruben Hauser	76.1%
	Power System Reliability		Number of fixed assets replaced against plan for critical Distribution assets (Poles)	Numbers of poles replaced against plan	Pole: 3,500	+/- 15%	Ruben Hauser	34.2%
	Program (Distribution)	22	Number of fixed assets replaced against plan for critical Distribution assets (Crossarms)	Numbers of crossarms replaced against plan	Cross-arm: 12,000	+/- 15%	Ruben Hauser	8.9%
		23	Number of fixed assets replaced against plan for critical Distribution assets (Cable)	Numbers of miles of cable replaced against plan	Cable: 60 miles	+/- 15%	Vincent Zabukovec	-9.5%
		24	Average unit price for critical Distribution assets (Transformers)	Average unit price per transformer	Transformer: \$10.1k	+/- 15%	David Hanson	-27.7%
	Power System Reliability	25	Average unit price for critical Distribution assets (Poles)	Average unit price per pole	Pole: \$35.6k	+/- 15%	David Hanson	-17.1%
	Program (Distribution)	26	Average unit price for critical Distribution assets (Cross-arms)	Average unit price per cross-arm	Cross-arm: \$1.2k	+/- 15%	David Hanson	0.0%
		27	Average unit price for critical Distribution assets (Cable)	Average unit price per mile of cable	Cable: \$1,407.4k	+/- 15%	David Hanson	0.8%
None	Distribution Automation Project	28	Distribution Automation Project total spending against plan	Board Approved Annual Budget vs. Actual expenditures	FY22/23 Board Approved Budget - May 2022	+/- 15%	Kodi Uzomah	-49.6%

Related Rate Adjustment Factor	Category	#	Board Metric	Definition	FY 22/23 Target	Acceptable Variance	Responsible Manager	October 2022 Performance
None	Distribution Automation Project progress		Distribution Automation Project progress against schedule	Project milestones met against project schedule	Project Milestones and Dates: Target date: FY 22/23 Qtr 2 (Oct 2022-Dec 2022) - Complete installation of pole top communication equipment. Target date: FY 22/23 Qtr 3 (Jan 2023-Mar 2023) - Complete system integration. Target date: FY 22/23 Qtr 4 (Apr 2023-Jun 2023) - Complete construction of DS-36.	Info only	Kodi Uzomah	N/A
None	Water Distribution Staffing Program		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 86 vacancies or less by the end of the fiscal year	+/- 15%	Breonia Lindsey/Sandra Foster	4.3%
	Water Supply	31	Water supply costs budget vs. actual (\$M) for capital	Board Approved Annual Budget vs. Actual expenditures	FY22/23 Board Approved Budget - May 2022	+/- 10%	April Thang	-68.1%
	Water Supply	32	Water supply costs budget vs. actual (\$M) for O&M (excluding Purchased Water costs)	Board Approved Annual Budget vs. Actual expenditures	FY22/23 Board Approved Budget - May 2022	+/- 10%	April Thang	10.9%
	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 Currely Cost	Water Supply	34	Annual quantity of recycled water delivered against plan (AF)	AF of recycled water delivered against plan	No Target	Info only	Jesus Gonzalez	NA
Water Supply Cost Adjustment Factor	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	-0.5%
	Capital Improvement Program	36	Budget vs. actual (\$M) for Aqueduct refurbishment capital	Board Approved Annual Budget vs. Actual expenditures	FY22/23 Board Approved Budget - May 2022	+/- 10%	Wendy McGhie	-47.0%
	Capital Improvement Program	37	Budget vs. actual (\$M) for Aqueduct refurbishment O&M	Board Approved Annual Budget vs. Actual expenditures	FY22/23 Board Approved Budget - May 2022	+/- 10%	Wendy McGhie	15.2%
	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	3.4%
	Capital Improvement Program	39	Budget vs. actual (\$M) for fixed assets replacement	Board Approved Annual Budget vs. Actual expenditures	FY22/23 Board Approved Budget - May 2022	+/- 10%	April Thang	-13.2%
Water	Capital Improvement Program	40	Assets replaced against plan	Feet of mainline replaced against plan	Mainline: 210,000 Feet	+/- 10%	Mainline & Meters: Breonia Lindsey/Sandra Foster	-5.2%
Infrastructure Adjustment Factor	Capital Improvement Program	41	Assets replaced against plan	Feet of trunkline replaced against plan	Trunkline: 11,515 Feet	+/- 10%	Trunkline: Milad Taghavi	5.8%
	Capital Improvement Program	42	Assets replaced against plan	Number of meters replaced against plan	Meters: 33,500	+/- 10%	Mainline & Meters: Breonia Lindsey/Sandra Foster	-16.2%

Related Rate Adjustment Factor	Category	#	Board Metric	Definition	FY 22/23 Target	Acceptable Variance	Responsible Manager	October 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	FY22/23 Board Approved Budget - May 2022	+/- 10%	Milad Taghavi	-9.3%
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	FY22/23 Board Approved Budget - May 2022	+/- 10%	Nelson Mejia	-24.8%
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	FY22/23 Board Approved Annual Authorized Personnel Resolution - May 2022	+/- 20%	Robert Meteau, Jr.	-19.6%
	Financial and Human Resources Replacement Project	47	Financial and Human Resources Replacement Project total spending against plan	Board Approved Annual Budget vs. Actual expenditures	FY22/23 Board Approved Budget - May 2022	+/- 20%	Rita Khurana-Carwile	-59.1%
	Financial and Human Resources Replacement Project	48	Financial and Human Resources Replacement Project progress against schedule	Project milestones met against project schedule	Phase 1: Architect Stage Completion July 2022 Phase 1: Architect Stage Configure and Prototype Stage Completion Jan 2023 Phase 2: Architect Stage Completion Jan 2023	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	FY22/23 Board Approved Budget - May 2022	+/- 15%	Stephen Kwok	-65.0%
	Customer Information System Upgrades		Budget vs. Actual (\$M) for Customer Information System (CIS) Upgrades, Enhancements and System Integrations	Board Approved Annual Budget vs. Actual expenditures	FY22/23 Board Approved Budget - May 2022	+/- 15%	Annamae Peji	-38.6%
	Information Technology Services Staffing Program		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	21.1%
	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	FY22/23 Board Approved Budget - May 2022	+/- 15%	LADWP Senior Management	-4.4%
	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

Related Rate Adjustment Factor	Category	#	Board Metric	Definition	FY 22/23 Target	Acceptable Variance	Responsible Manager	October 2022 Performance
Energy Cost Adjustment Factor	Renewable Portfolio Standard (Owned)	56	Green House Gas (GHG) emissions reduction ratio	1990 (in millions of metric tons)	Calendar Year 2022: 60% below LADWP's 1990 levels Calendar Year 2023: 60% below LADWP's 1990 levels	+5%	Katherine Rubin	39.0%
	Energy Efficiency	57	Energy Efficiency (EE) ratio (%)	GWh installed compared to the 2020 baseline/GWh for all customers	1.50%	+/- 15%	David Jacot	-19.9%
Energy Cost Adjustment Factor	Energy Efficiency	58	Budget vs. actual (\$M) for the overall EE portfolio	Board Approved Annual Budget vs. Actual expenditures	FY22/23 Board Approved Budget - May 2022	+/- 15%	David Jacot	-23.1%
	Energy Efficiency	59	Levelized EE program costs (\$/kWh)	Cost per kWh over lifetime of installed energy efficiency solutions	Annual metric: Levelized Cost \$0.15/kWh	+/- 10%	David Jacot	

Power System

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

RESPONSIBLE MANAGER: Brian Williams, Power System Training

REPORTING PERIOD: October 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 22/23): Target = \$538.2 per EDMT; Acceptable Variance = ± 25%

STATUS: Within Acceptable Variance

FYTD	Planned	Actual	Var	iance	Re-Estimate	
as of:	(\$/trainee)	(\$/trainee)	\$	%		
Jul-22	538.2	533.2	(5.0)	-0.9%		
Aug-22	538.2	750.9	212.7	39.5%		
Sep-22	538.2	695.7	157.5	29.3%		
Oct-22	538.2	487.0	(51.2)	-9.5%		
Nov-22	538.2				549.2	
Dec-22	538.2		147		549.2	
Jan-23	538.2		(549.2	
Feb-23	538.2				549.2	
Mar-23	538.2				549.2	
Apr-23	538.2				549.2	
May-23	538.2				549.2	
Jun-23	538.2				549.2	
	Accepta	ble Variance	+	25%	2.0%	

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:
 - o 2014 to 2015: 56%
 - o 2016 to 2017: 59%
 - o 2018 to 2019: 60%
 - o 2020 to 2021: 63%

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

- 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.
- Due to the decreased spending in the Manage and Administer the PSST Organization (X7955), Classroom Trainer for EDM Trainees (X7999), and Classroom Training for EDM Trainees (X7922) Jobs, the Actual CPT is lower this month as compared to September.



The main drivers for the lower CPT are the decreased Allocations and Directs for X7999 and X7922.

- Annualized Job totals for (X7922/X7999/X7955) vary depending on the tools and materials purchased for subsequent new classes.
- The Re-Estimate of \$549.2K was calculated using the final figures of the related jobs (X7922/X7999/X7955) for the entire fiscal year 21/22 with the 12-month average trainee occupancy.

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

 The screening process is continually being reviewed in an effort to increase the quality of candidates and to reduce the dropout rate. Overhead and underground disciplines are no longer separated and all future trainees are cross-trained in both. EDM trainee candidates are now required to complete two performance tests during the initial certification interviews.

Within Acceptable Variance

Needs Attention

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

RESPONSIBLE MANAGER: Brian Williams, Power System Training

REPORTING PERIOD: October 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 22/23): Target = \$922.6K per EMT; Acceptable Variance = ± 25%

STATUS: Exceeds Target

FYTD	Planned	Actual	Vari	ance	Re-Estimate	
as of:	(\$/trainee)	(\$/trainee)	\$	%		
Jul-22	922.6	771.0	(151.6)	-16.4%		
Aug-22	922.6	725.8	(196.8)	-21.3%		
Sep-22	922.6	545.0	(377.6)	-40.9%		
Oct-22	922.6	628.0	(294.6)	-31.9%		
Nov-22	922.6				855.9	
Dec-22	922.6				855.9	
Jan-23	922.6				855.9	
Feb-23	922.6				855.9	
Mar-23	922.6				855.9	
Apr-23	922.6				855.9	
May-23	922.6				855.9	
Jun-23	922.6				855.9	
10	Accepta	ble Variance	±	25%	-7.2%	

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

1. BACKGROUND / PURPOSE

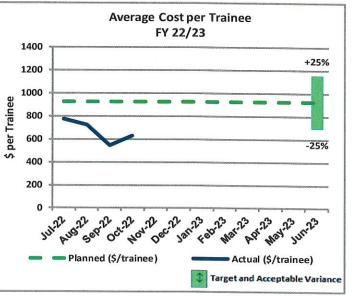
 To effectively calculate a monthly cost per trainee (CPT) for an Electrical Mechanic (EM) completing a 48-month on-the-job and classroom training program. The EM Training Program has changed from a 40-month program to a 48-month program.

2. ACHIEVEMENTS / MILESTONES MET

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

3. <u>PERFORMANCE / VARIANCE ANALYSIS</u> & 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.
- Due to the increased spending in the Classroom Training for EM Trainees (X7923) Job, the Actual CPT is slightly higher this month as compared to September. The main



driver for the higher CPT is the increased Directs and Allocations for X7923.

- Annualized Job totals for (X7923/X7926/X7955) vary depending on the tools and materials purchased for subsequent new classes.
- The Re-Estimate of \$855.9K was calculated using the final figures of the related Jobs (X7923/X7926/X7955) for the entire fiscal year 21/22 with the 12-month average trainee occupancy.

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

 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)

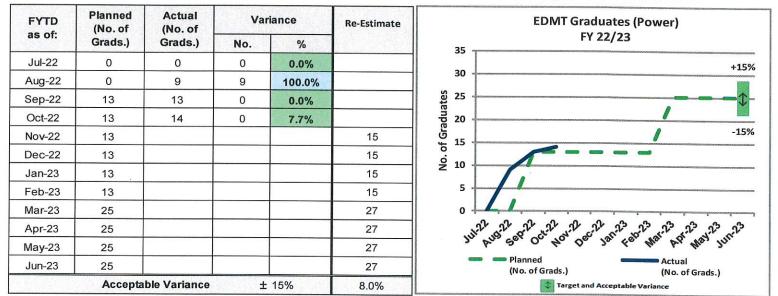
RESPONSIBLE MANAGER: Brian Williams, Power System Training

REPORTING PERIOD: October 2022

DEFINITION OF RATES METRIC: Electric Distribution Mechanic Trainee (EDMT) Graduates Against Training Plan **TARGET & ACCEPTABLE VARIANCE (FY 22/23):** Target = 25 graduates; Acceptable Variance = ± 15%

STATUS: Within Acceptable Variance

Buan hillians



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 21/22, a total of 31 EDMs graduated. Seventeen of the eighteen EDMTs who started from Class 60 graduated as EDMs, yielding a 94% success rate.
- The past classes average success rates are based on two calendar years as follows:
 - o 2014 to 2015: 56%
 - o 2016 to 2017: 59%
 - o 2018 to 2019: 60%
 - o 2020 to 2021: 63%

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

- Due to the modified screening process, there has been an increase in the quality of candidates who have entered the Training Program, yielding a higher graduation rate.
- There are currently seven active trainee classes in the Training Program. Class 62 graduated 14 trainees. The remaining trainee is expected to graduate, yielding a total of 15 graduates from Class 62 (graduation rate of 75%).

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

 The screening process is continually being reviewed in an effort to increase the quality of candidates and to reduce the dropout rate. Overhead and underground disciplines are no longer separated and all future trainees are cross-trained in both. EDMT candidates are now required to complete two performance tests during the initial certification interviews.



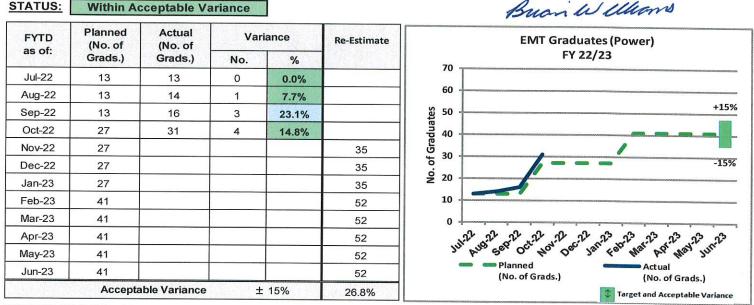
LADWP RATES METRIC - EMT Graduates (Power)

RESPONSIBLE MANAGER: Brian Williams, Power System Training

REPORTING PERIOD: October 2022

4

DEFINITION OF RATES METRIC: Electrical Mechanic Trainee (EMT) Graduates Against Training Plan **TARGET & ACCEPTABLE VARIANCE (FY 22/23):** Target = 41 graduates; Acceptable Variance = ± 15%



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

1. BACKGROUND / PURPOSE

Power System Safety & Training (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 21/22, a total of 35 EMTs graduated. Sixteen of eighteen trainees graduated from Class 22A, yielding a graduation rate of 89%.
- The past classes average success rates are based on two calendar years as follows:
 - 1. 2014 to 2015: 70%
 - 2. 2016 to 2017: 85%
 - 3. 2018 to 2019: 89%
 - 4. 2020 to 2021: 75%

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

- There are currently ten active trainee classes in the Training Program. Fifteen trainees graduated from Class 22C. Another four from 22C are expected to graduate in the coming months, yielding a graduation rate of 86%.
- Due to the modified screening process, there has been an increase in the quality of candidates who have entered the Training Program, yielding a higher graduation rate.

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

There is an aggressive hiring plan to add approximately 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)

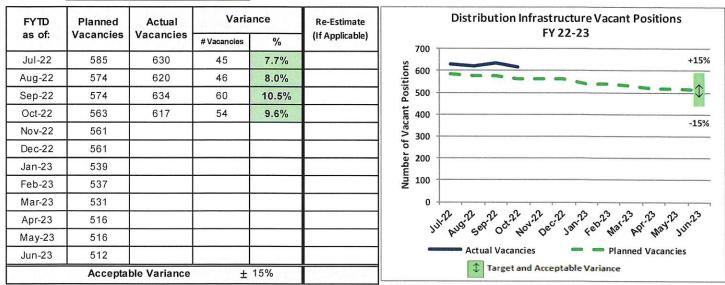
RESPONSIBLE MANAGER: Brian Wilbur

REPORTING PERIOD: October 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 22/23): Vacant budgeted Power Distribution Infrastructure field positions at 512 or less by the end of the fiscal year/, ±15%

STATUS: Within Acceptable Variance



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 Transmission & Distribution (PTD), Power Construction & Maintenance (PCM), and Power System Integrated Support Services (PSISS).
- The target is to reduce vacant budgeted Power Distribution Infrastructure Field positions to 512 or less by the end of the fiscal year.

2. ACHIEVEMENTS/MILESTONES MET

 During the month of October, there was a total of 617 vacancies, which was 54 or 9.6% over planned vacancies.

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

• The current rate of hiring budgeted positions is within 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), Electrical Craft Helper (ECH), and Line Maintenance Assistant (LMA) positions.

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

Exceeds Target

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

Needs Attention

LADWP RATES METRIC – *Total Renewable Portfolio Standard (Power)*

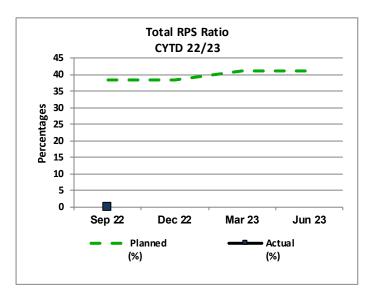
RESPONSIBLE MANAGER: Steven Pruett, Power External Energy Resources

REPORTING PERIOD: October 2022

DEFINITION OF RATES METRIC: GWH from RPS Resource/GWH of Retail Sales (State Requirement), In Percentages (%) **TARGET & ACCEPTABLE VARIANCE (FY 22/23):** Target = 38.50% for calendar year 2022 and 41.25% for calendar year 2023; Acceptable Variance = ± 3%

STATUS:	Data	Not Availa	ble				
CYTD as of:	Planned (%)	Actual (%)	Variance %	Re-Estimate (If Applicable)			
Sep 22	38.50	*					
Dec 22	38.50						
Mar 23	41.25						
Jun 23	41.25						
Acceptab	Acceptable Variance ± 3%						

*Actuals for the first quarter of FY 22/23 will be available in December 2022.



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 RPSeligibility of a publicly owned utility.
- There are other RPS-related Rates Metric Reports for Wind, Solar, and Geothermal.

2. ACHIEVEMENTS / MILESTONES MET

• No updates.

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

• The original 2023 calendar year submittal was targeted at 41.3%. The current target of 41.25% reflects a rounding error on the board approved package and cannot be modified.

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

- Uncertainty in performance of renewable resources, evolving accounting methods, changing regulations, and transmission disruptions are risk factors that can impact the performance of this metric.
- To meet the RPS goals and avoid the risk of non-compliance with the CEC's RPS requirement, LADWP uses targets (forecasts) above the CEC's RPS ratio requirement. This will provide a hedge against the abovementioned risk factors.
- Excess Renewable Energy Credits (RECs) from one compliance period can be rolled over into the next compliance period.

6

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

RESPONSIBLE MANAGER: Marlon Santa Cruz, PEER External Energy Resources REPORTING PERIOD: October 2022 DEFINITION OF RATES METRIC: Total RPS Purchased Power Cost (\$/MWH), Per Power Purchase Agreements (PPA), As Compared To Plan, By Wind

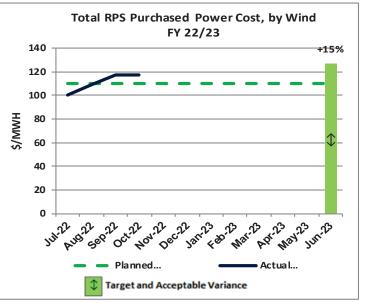
TARGET & ACCEPTABLE VARIANCE (FY 22/23): Target = \$110.08/MWH; Acceptable Variance = + 15%

STATUS: Within Acceptable Variance

				-	
FYTD	Planned	Actual	Vari	ance	Re-Estimate
as of:	(\$/MWH)	(\$/MWH)	\$	%	ne Lotinute
Jul-22	110.08	100.01	-10.07	-9.1%	
Aug-22	110.08	109.14	-0.94	-0.9%	
Sep-22	110.08	117.05	6.97	6.3%	
Oct-22	110.08	117.26	7.18	6.5%	
Nov-22	110.08				
Dec-22	110.08				
Jan-23	110.08				
Feb-23	110.08				
Mar-23	110.08				
Apr-23	110.08				
May-23	110.08				
Jun-23	110.08				
	Acceptab	le Variance	+	15%	

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Santa Cruz



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

1. BACKGROUND / PURPOSE

- PPA = Power Purchase Agreement. The energy cost is calculated at plant's "busbar", in dollars per mega-watt-hour (\$/MWH), per executed PPA.
- The aggregated energy costs are the weighted average of seven wind PPAs for which the \$/MWH cost is determined by the seven individual PPAs, but the energy outputs are a function of the individual project's capacity and wind resource availability, which is variable.
- Wind energy supports meeting Renewable Portfolio Standard (RPS) goals. Wind energy is currently estimated to represent 41% of the Calendar Year 2022 RPS portfolio.

2. ACHIEVEMENTS / MILESTONES MET

No updates.

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

• Actual is within acceptable variance.

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

• No recommendations at this time.

Date: 2022.11.22 13:44:13 -08'00' **TTEC METDIC** __ **Totol DDC** CO

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Santa Cruz

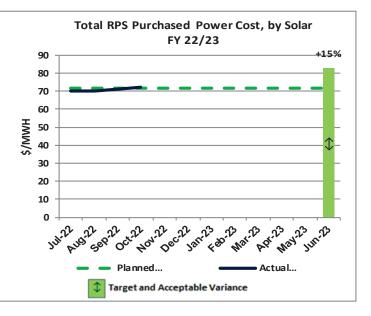
LADWP RATES METRIC – *Total RPS Cost vs. Plan, By Solar (Power)*

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

DEFINITION OF RATES METRIC: Total RPS Solar Purchased Power Cost (\$/MWH) as Compared To Plan **TARGET & ACCEPTABLE VARIANCE (FY 22/23):** Target = \$71.93/MWH; Acceptable Variance = + 15%

STATUS: Within Acceptable Variance

FYTD	Planned	Actual	Vari	ance	Re-Estimate
as of:	(\$/MWH)	(\$/MWH)	\$	%	
Jul-22	71.93	70.01	-1.92	-2.7%	
Aug-22	71.93	70.12	-1.81	-2.5%	
Sep-22	71.93	71.38	-0.55	-0.8%	
Oct-22	71.93	72.09	0.16	0.2%	
Nov-22	71.93				
Dec-22	71.93				
Jan-23	71.93				
Feb-23	71.93				
Mar-23	71.93				
Apr-23	71.93				
May-23	71.93				
Jun-23	71.93				
	Acceptab	le Variance	+	15%	



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

1. BACKGROUND / PURPOSE

- PPA = Power Purchase Agreement. The energy cost is calculated at plant's "busbar", in dollars per mega-watt-hour (\$/MWH), per executed PPA.
- The aggregated energy costs are the weighted average of the solar PPAs for which the \$/MWH cost is fixed by individual PPAs and weighted by actual generation.
- Solar energy supports meeting Renewable Portfolio Standard (RPS) goals. Solar energy is currently estimated to represent 37% of the Calendar Year 2022 RPS portfolio.

2. ACHIEVEMENTS / MILESTONES MET

No updates.

- 3. <u>PERFORMANCE / VARIANCE ANALYSIS</u> <u>& YEAR END PROJECTION</u>
 - Actual is within acceptable variance.

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

• No recommendations at this time.

Date: 2022.11.22 13:47:31

-08'00 ES METRIC – *Total RPS Cost vs. Plan, By Geothermal (Power)*

REPORTING PERIOD: October 2022 **RESPONSIBLE MANAGER:** Marlon Santa Cruz, PEER External Energy Resources 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 22/23): Target = \$80.46/MWH; Acceptable Variance = + 15%

STATUS: Within Acceptable Variance

FYTD	Planned	Actual	Vari	ance	Re-Estimate		
as of:	(\$/MWH)	(\$/MWH)	\$	%			
Jul-22	80.46	79.18	-1.28	-1.6%			
Aug-22	80.46	80.20	-0.26	-0.3%			
Sep-22	80.46	85.25	4.79	6.0%			
Oct-22	80.46	77.55	-2.91	-3.6%			
Nov-22	80.46						
Dec-22	80.46						
Jan-23	80.46						
Feb-23	80.46						
Mar-23	80.46						
Apr-23	80.46						
May-23	80.46						
Jun-23	80.46						
	Acceptab	le Variance	+	15%			

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Santa Cruz

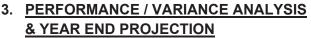
SOURCE OF DATA: Monthly energy invoice per PPA (KPI # 01.03.01.18)

1. BACKGROUND / PURPOSE

- PPA = Power Purchase Agreement. The energy cost is calculated at plant's "busbar", in dollars per mega-watt-hour (\$/MWH), per executed PPA.
- The aggregated energy costs are the weighted average of six geothermal PPAs for which the \$/MWH cost is fixed for firm and imbalance energy. However, the energy outputs are a function of the individual project's capacity and geothermal resource availability, which is variable.
- Geothermal energy supports meeting Renewable Portfolio Standard (RPS) goals. Geothermal energy currently represents 22% of the Calendar Year 2022 RPS portfolio.

2. ACHIEVEMENTS / MILESTONES MET

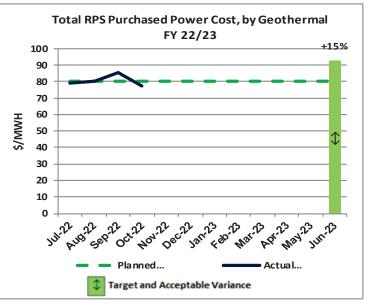
No updates.



Actual is within acceptable variance.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

No recommendations at this time.



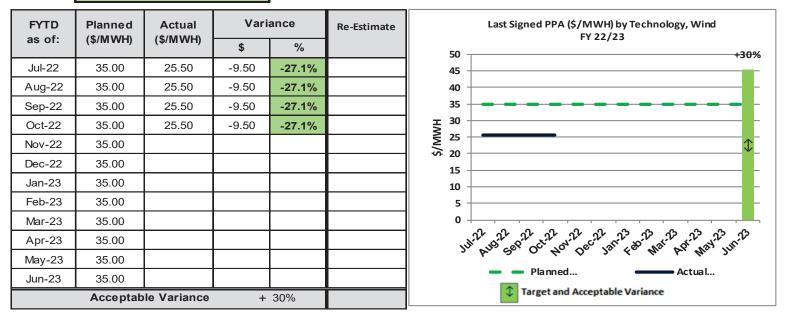
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DWP RATES METRIC – *Last Signed PPA (\$/MWH) by Technology. Wind (Power)*

REPORTING PERIOD: October 2022

RESPONSIBLE MANAGER: Marlon Santa Cruz, PEER External Energy Resources DEFINITION OF RATES METRIC: Last Signed PPA (\$/MWH) by Technology, Wind TARGET & ACCEPTABLE VARIANCE (FY 22/23): Target = \$35.00/MWH; Acceptable Variance = + 30%

STATUS: Within Acceptable Variance



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 2021 Padilla Report, which reflects current trends and does not include transmission costs.

2. ACHIEVEMENTS / MILESTONES MET

The last signed PPA is Red Cloud Wind which 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.

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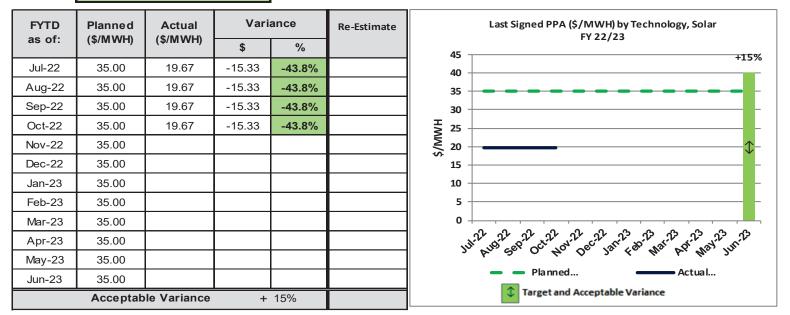
Digitally signed by Marlon Santa Cruz Date: 2022.11.22 13:46:03

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

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

 DEFINITION OF RATES METRIC: Last Signed PPA (\$/MWH) by Technology, Solar
 TARGET & ACCEPTABLE VARIANCE (FY 22/23): Target = \$35.00/MWH; Acceptable Variance = + 15%

STATUS: Within Acceptable Variance



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-watthour (\$/MWH).
- The target is based on CPUC's 2021 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. <u>PERFORMANCE / VARIANCE ANALYSIS</u> <u>& YEAR END PROJECTION</u>

• Actual is within acceptable variance.

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

• No recommendations at this time.

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Santa Cruz Date: 2022.11.22 13:45:02

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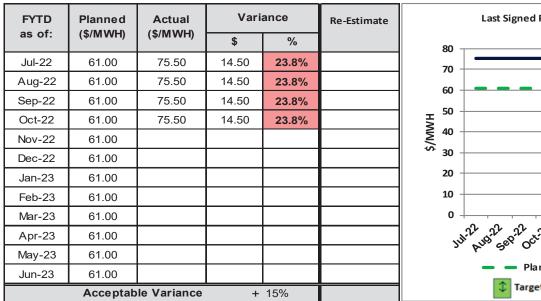
LADWP RATES METRIC – *Last Signed PPA (\$/MWH) by Technology, Geothermal (Power)*

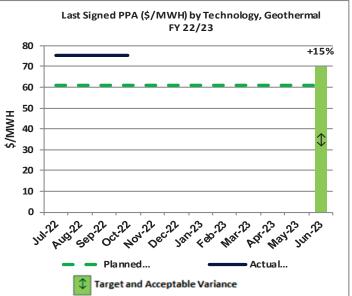
RESPONSIBLE MANAGER: Marlon Santa Cruz, PEER External Energy Resources **REPORTING PERIOD**: October 2022

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

TARGET & ACCEPTABLE VARIANCE (FY 22/23): Target = \$61.00/MWH; Acceptable Variance = + 15%

STATUS: Outside Acceptable Variance





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 "busbar", 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 2021 Padilla Report, which reflects current trends.

2. ACHIEVEMENTS / MILESTONES MET

No updates.

- 3. <u>PERFORMANCE / VARIANCE ANALYSIS</u> <u>& YEAR END PROJECTION</u>
 - Actual is above the target due to current market trends.

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

No recommendations at this time.

LADWP RATES METRIC – *Power System Reliability Program Generation, Capital (Power)*



 RESPONSIBLE MANAGER: Robert Fick, Power Supply Operations
 REPORTING PERIOD: October 2022

 DEFINITION OF RATES METRIC: Board Approved Annual Budget vs. Actual Expenditures For PSRP Generation, Capital
 TARGET & ACCEPTABLE VARIANCE (FY 22/23): Target = \$21,271K; Acceptable Variance = ± 15%

FYTD	Approved Budget	Actual	Varia	nce	Re-Estimate		PSRP Generation, Capital
as of:	(\$ in K)	(S in K)	\$ in K	%	(If Applicable)	30000 т	FY 22/23
Jul-22	1,772.6	781.0	-991.6	-55.9%			+15%
Aug-22	3,545.2	1,311.0	-2,234.2	-63.0%		25000 -	
Sep-22	5,317.8	2,299.0	-3,018.8	-56.8%		20000 -	
Oct-22	7,090.3	2,993.0	-4,097.3	-57.8%		×	-15%
Nov-22	8,862.9					.⊑ 15000 - ∽	-13%
Dec-22	10,635.5					10000 -	
Jan-23	12,408.1					5000 -	
Feb-23	14,180.7					5000	
Mar-23	15,953.3					0 -	
Apr-23	17,725.8						hand seed of the way been sond for the hard and have survey
May-23	19,498.4						
Jun-23	21,271.0						Approved Budget Actual Target and Acceptable Variance

SOURCE OF DATA: FI 21186 (KPI # 01.03.01.08)

1. BACKGROUND / PURPOSE

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

2. ACHIEVEMENTS / MILESTONES MET

- In July, crews successfully installed the 550-ton Rotor at Castaic Power Plant (CPP) Generator Stator of Unit 1. The CPP Station Service Bank 2 Transformer was placed in-service. Completion of this multi-year project provides increased flexibility and redundancy for pumpstarting hydroelectric generating units, which translates to increased reliability for units to meet the needs of the Power System and rate payers.
- In August, repairs to CPP Generator Stator of Unit 1 were completed; however, the 230kV Main Bank Transformer tripped during startup and testing of the unit. Repairs are anticipated to be complete by September 2022.

- In September, repairs to the 230kV Main Bank Transformer for CPP Generator Stator Unit 1 were completed and unit placed back in service on September 16, 2022. Completing this work is important for the long-term reliable operation of the hydro-electric generator.
- In October, replacement of the CPP failed E51 circuit breaker was completed resulting in Unit 4 being returned back to service in all modes on October 4, 2022. CPP crews also completed the 2500-hour Service, Inspection and Repair (SIR) work for Unit 4. Unit returned back to service in all modes on October 27, 2022. Completing this work is important for the longterm reliable operation of the hydro-electric generator.



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

- Cranes at Aqueduct Power Plant (APP) are out of order. Staff is not able to perform inspection and overhaul.
- Lack of personnel resources to work on CPP electrical and mechanical repair services

Total Project Approved	
From Inception to FY29/30	\$342.0M
Total Project Estimates	\$290.5M
Projects Approved to Date	\$208.2M
Project Actuals to Date	\$119.9M

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

- Completion of the CPP Major Overhaul by July 2023.
- Cranes at APP will not be fixed until 2024 due to lengthy bid process
- More resources will be allocated to CPP electrical and mechanical repair work



LADWP RATES METRIC – *PSRP Transmission, Capital (Power)*

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

REPORTING PERIOD: October 2022

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

TARGET & ACCEPTABLE VARIANCE (FY 22/23): Target = \$41,792K; Acceptable Variance = ± 15%

STATUS: Outside Acceptable Variance Approved FYTD Variance **PSRP Transmission, Capital** Actual **Re-Estimate** Budget FY 22/23 as of: (\$ in K) \$ in K % (\$ in K) 60000 Jul-22 3,482.6 1,462.1 (2,020.5)-58.0% +15% 50000 Aug-22 6,965.3 2,779.0 (4, 186.3)-60.1% Sep-22 10,447.9 4,325.0 (6, 122.9)-58.6% 40000 Oct-22 13,930.5 7,184.0 (6,746.5)-48.4% \$ in K 30000 17,413.2 16,766.3 Nov-22 Dec-22 20.895.8 20,119.5 20000 24,378.4 Jan-23 23,472.8 10000 Feb-23 27,861.1 26,826.0 0 Mar-23 31.343.7 30.179.3 octill Marila A91-23 May23 Non Decy Jaury 34,826.3 33,532.5 Apr-23 May-23 38,309.0 36,885.8 Approved Budget... Actual... Jun-23 41.791.6 40.239.0 Target and Acceptable Variance Acceptable Variance ± 15% -3.7%

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.

2. ACHIEVEMENTS / MILESTONES

As of August, the last maintenance hole lid restraint was installed in furtherance of this PSRP goal and program is competed.

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

- Actual costs were below the approved budget by 48.4%, which is outside the acceptable variance.
- Underrun is primarily caused by the in-service date of Toluca-Hollywood Line 1 Upgrade (Job O9810) being pushed to 2027. To maintain power system reliability, this circuit cannot be placed out of service and upgrade work completed as originally scheduled in 2025. The majority of expenditures is expected to be spent after 2024 due to the revised outage schedule.

Total Project Approved From	
Inception to FY29/30	1,730.6M
Project Approved to Date	1,290.6M
Project Actuals to Date	1,146.1M

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

- Continue to support progress on these jobs according to their respective milestone schedules.
- Obtain fresh FY estimates from the Job Manager for Toluca Hollywood L1 Upgrade (Job O9810).

Within Acceptable Variance

12/14/2022

Juan Esparza RATES METRIC – *PSRP Transmission, O&M (Power)*

REPORTING PERIOD: October 2022 RESPONSIBLE MANAGER: Ruben Hauser, Power Transmission and Distribution DEFINITION OF RATES METRIC: Board Approved Annual Budget vs. Actual Expenditures For PSRP Transmission, O&M TARGET & ACCEPTABLE VARIANCE (FY 22/23): Target = \$38,029K; Acceptable Variance = ± 15%

STATUS: **Outside Acceptable Variance**

FYTD		Actual	Variance		Re-Estimate
as of:	Budget (\$ in K)	(\$ in K)	\$ in K	%	(If Applicable)
Jul-22	3,150.0	1,901.0	-1,249.0	-39.7%	
Aug-22	5,050.0	6,671.0	1,621.0	32.1%	
Sep-22	7,150.0	10,653.0	3,503.0	49.0%	
Oct-22	9,525.0	14,094.0	4,569.0	48.0%	
Nov-22	11,579.9				
Dec-22	14,579.9				
Jan-23	17,455.4				
Feb-23	20,281.0				
Mar-23	23,407.5				
Apr-23	29,640.0				
May-23	31,541.2				
Jun-23	38,029.3				
Acceptable Variance ±15%					

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

1. **BACKGROUND / PURPOSE**

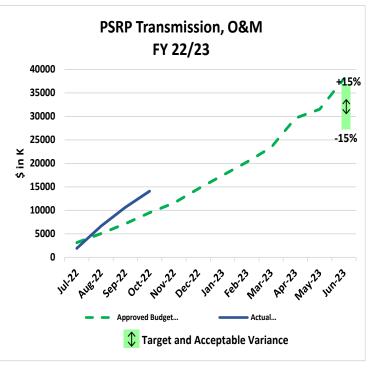
To maintain facilities generally consisting of overhead and underground high voltage electric circuitry used to transport electricity in bulk quantities from generation facilities to distribution facilities over long distances for system reliability. Power Transmission & Distribution (PTD) operates and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

2. **ACHIEVEMENTS / MILESTONES MET**

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

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- The KPI is outside the 15% threshold set for its goal.
- October 2022 YTD actuals are over due to the following:
 - The overrun is primarily due to the 0 Overhead Transmission Lines O&M (Job B1232) crews working additional overtime to maintain the schedule of changing out



polymer insulators to glass insulators on towers in the high fire zone areas. Access to these locations has been difficult and requires the increase use of our helicopter services.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

Power Transmission and Distribution (PTD) management will monitor this FI and address any variations.

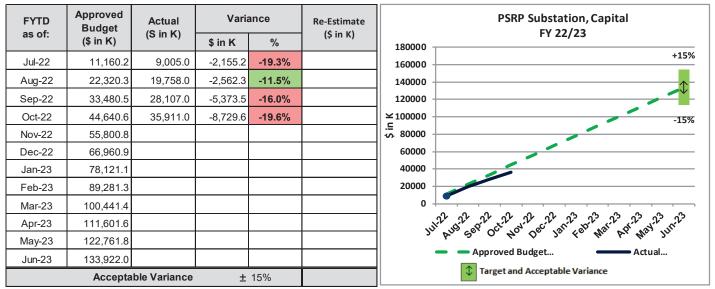
LADWP RATES METRIC - PSRP Substation, Capital (Power)

RESPONSIBLE MANAGER: Tesfaye Zeleke Mult Balan Digitally signed by Sharat Batra Date: 2022.12.19 15:41:48 -0800' Power Engineering and Technical Services Division

REPORTING PERIOD: October 2022

DEFINITION OF RATES METRIC: Board Approved Annual Budget vs. Actual Expenditures for PSRP Substation, Capital **TARGET & ACCEPTABLE VARIANCE (FY 22/23):** Target = \$133,922.0K; Acceptable Variance = ± 15%

STATUS: Outside Acceptable Variance



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

1. BACKGROUND / PURPOSE

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

2. ACHIEVEMENTS / MILESTONES

Transformer, circuit breaker replacement, substation automation, feeders and trunklines design progress is captured in the completed Construction Work Packages (CWP) KPIs in the table below:

KPI	PSRP Replacements or Upgrades:	FYTD Completed CWP Actual	FYTD Completed CWP Target	FYE Completed CWP 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	0	2
04.01.01.81	High Voltage Transformers (high side 100kV to 230kV - RS, SS)	1	1	3
04.01.01.77	Medium Voltage Transformers (high side below 100kV – Distributing Station - DS)	0	5	29
	CIRCUIT BREAKER REPLACEMENT:			
04.01.01.78	Transmission Circuit Breakers (>100kV - RS, SS, High Voltage Alternate Current Switchyards)	0	3	15
04.01.01.79	Sub-transmission Circuit Breakers (34.5kV - RS, DS)	7	20	59
04.01.01.80	Distribution Circuit Breakers (4.8kV - DS)	0	24	75
	SUBSTATION AUTOMATED:			
04.01.03.03	Issue Substation Automation CWP	0	4	12
	FEEDERS AND TRUNKLINES:			
04.01.01.82	34.5kV Line Positions (Reported Quarterly)	0	0	4
04.01.01.83	4.8kV Feeder Positions (Reported Quarterly)	9	6	24
	BATTERY SYSTEMS:			
04.01.01.87	Substation Battery Systems (RS, DS)	1	5	15

Outside Acceptable Variance

Exceeds Target

Needs Attention

• Transformer, circuit breaker replacement, substation automation, feeders and trunklines construction progress is captured in the table below

PSRP Replacements or Upgrades:	FYTD Actual Placed In-serviced
TRANSFORMER REPLACEMENT:	
Extra High Voltage (high side >230kV – Receiving Station (RS), Switching Station (SS), High Voltage Direct Current Converter Stations)	0
High Voltage Transformers (high side 100kV to 230kV - RS, SS)	0
Medium Voltage Transformers (high side below 100kV – Distributing Station - DS)	0
CIRCUIT BREAKER REPLACEMENT:	
Transmission Circuit Breakers (>100kV - RS, SS, High Voltage Alternate Current Switchyards)	2
Sub-transmission Circuit Breakers (34.5kV - RS, DS)	3
Distribution Circuit Breakers (4.8kV - DS)	12
SUBSTATION AUTOMATED:	
Distributing or Receiving Station Upgrade/Automation	1
FEEDERS AND TRUNKLINES:	
34.5kV Line Positions (Reported Quarterly)	0
4.8kV Feeder Positions (Reported Quarterly)	1
BATTERY SYSTEMS:	
Substation Battery Systems (RS, DS)	0

Additional year-to-date achievements and milestones include:

• Substation Equipment Life Extensions: (2) DS transformer Cans, (53) 34.5 kV circuit breakers and (7) 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. In addition, due to summer loading conditions (high customer power needs during summer time) and limited outages, circuits were not de-energized to be worked on. 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.
- 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. Power System Safety and Training have graduated fifty-one (51) Electric Mechanic Trainees (EMTs) in the current calendar year. In 2023, sixty (60) additional EMTs will be hired.
- FI 211-95 includes Annual (perpetual) jobs, so single estimated lifetime expenditure does not apply.

Total Project Approved from	
Inception to FY29/30	\$2,997.5M
Project Approved to Date	\$1,867.2M
Project Actuals to Date	\$1,546.3M

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

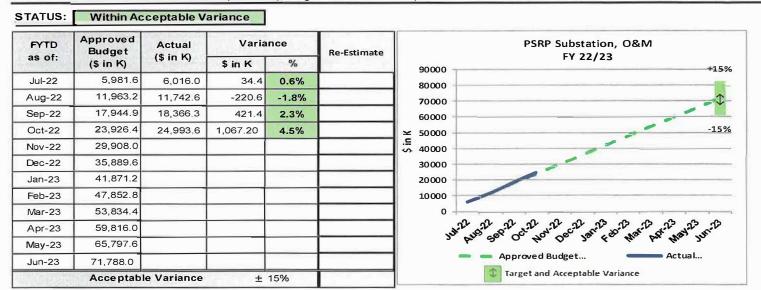
- Conduct coordination meetings with various supporting divisions to align resources from the planning, design, procurement, construction, and commissioning phases of projects.
- Perform long-term planning to identify future resource needs to support the Substation Power System Reliability Program.
- Convene bi-monthly Power System Resiliency planning, design, construction, and commissioning meetings necessary to
 elevate 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)

 RESPONSIBLE MANAGER: Jonathan Fonti, Power System Integrated Support Services
 REPORTING PERIOD: October 2022

 DEFINITION OF RATES METRIC: Budget Approved Annual Budget vs. Actual Expenditures for PSRP Substation, O&M
 TARGET & ACCEPTABLE VARIANCE (FY 22/23): Target = \$71,788K; 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. <u>PERFORMANCE/VARIANCE ANALYSIS & YEAR</u> END PROJECTION

Overall overrun is mainly attributed to labor (CE10 and CE11), ongoing equipment repairs and restorations at various Receiving and Distributing Stations system-wide, including but not limited to, troubleshooting Transformer Banks, Circuit Breakers (CB), Battery Systems, Capacitor Banks, and Voltage Regulators. Additionally, 4.8kV CB Preventative Maintenance (PM) at our Distributing Stations is in progress in all areas and will continue over the next couple of years in order for ESM to meet the target of performing PM's on over 3000 4.8kV CBs' system wide.

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

 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 October 2022, ESM received 7 new EMs from the Training Center and expects to receive 7 additional new EMs in February 2023.

Exceeds Target

ACHIEVEMENTS / MILESTONES MET

	JULY 2022	AUG 2022	SEPT 2022	OCT 2022	NOV 2022	DEC 2022	JAN 2023	FEB 2023	MAR 2023	APR 2023	MAY 2023	JUNE 2023	TOTAL
NO. OF RESTORATIONS OF CUSTOMER CIRCUITS:													
Receiving Stations (RS) Circuit Outages	28	41	58	41									168
Distributing Station (DS) Circuit Outages	67	67	117	76									327
5-kV Circuit Grounds	43	55	81	37									216
NO. OF INSULATOR WASHINGS:													
Generating Stations	1	0	0	0									1
Receiving Stations	4	5	6	6									21
Distributing Stations	14	17	12	15									58

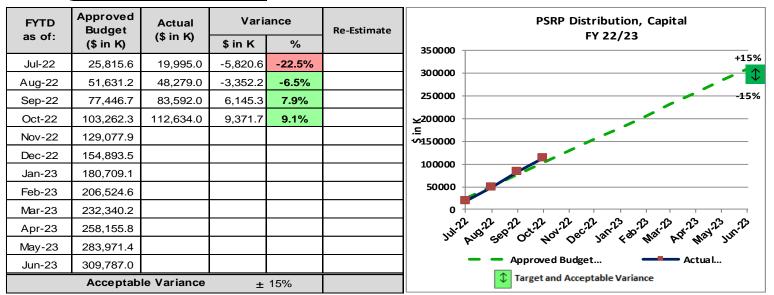
The following table details the monthly breakdown of Substation O&M activity since OCTOBER 2022.

LADWP RATES METRIC – *PSRP Distribution, Capital (Power)* RESPONSIBLE MANAGER: Vincent Zabukovec Vincent Zabukovec REPORTING PERIOD: October 2022

Power Engineering and Technical Services Division

DEFINITION OF RATES METRIC: Board Approved Annual Budget vs. Actual Expenditures For PSRP Distribution, Capital TARGET & ACCEPTABLE VARIANCE (FY 22/23): Target = \$309,787K; Acceptable Variance = ± 15%

STATUS: Within Acceptable Variance



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 (PSRP) distribution capital projects.
- Below is the approved budget % of four major functions:
 - Transformers: 4% (Jobs P6309 & P6394) 0
 - Poles: 41% (Job P6322) 0
 - Crossarms: 6% (Job P6318) 0
 - Cables: 19% (Job P6306) \cap

ACHIEVEMENTS / MILESTONES MET 2.

- The Distribution Reliability spent 109% of the budget through the month of October to work on and complete the following:
 - New rack and bank installation RS-Rinaldi, \circ RS-B and RS-M
 - 669 transformer installations 0
 - 1,567 pole replacements 0
 - 4,354 deteriorated crossarm replacements 0
 - 18.1 circuit-mile of cable replacements 0
 - 0 3,970 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 October is \$9.4M, 9.1% over budget. This is due to District and Contract Operations crews focusing resources on PSRP distribution capital projects such as cable replacements, transformer replacements, and pole replacements. Furthermore, new infrastructure upgrades such as conduit and substructures were required for these projects. Additional overtime labor was also required to restore customer outages during nights and weekends to minimize outage durations.

Total Project Approved From	
Inception to FY29/30	\$6,601.5M
Projects Approved to Date	\$3,986.4M
Project Actuals to Date	\$3,594.8M

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

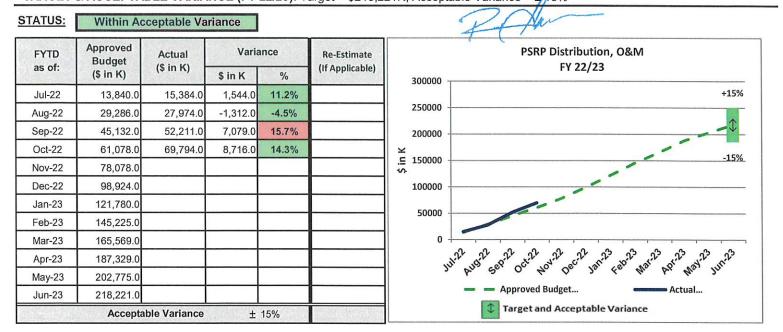
No mitigation plan at this point.

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

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

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

 TARGET & ACCEPTABLE VARIANCE (FY 22/23): Target = \$218,221K; 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. <u>PERFORMANCE / VARIANCE ANALYSIS</u> <u>& YEAR END PROJECTION</u>

- This KPI is within the 15% threshold set for its goal.
- The overrun is due to higher than expected contract work for Power Transmission Distribution Vegetation Management Programs (Job P6341).

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

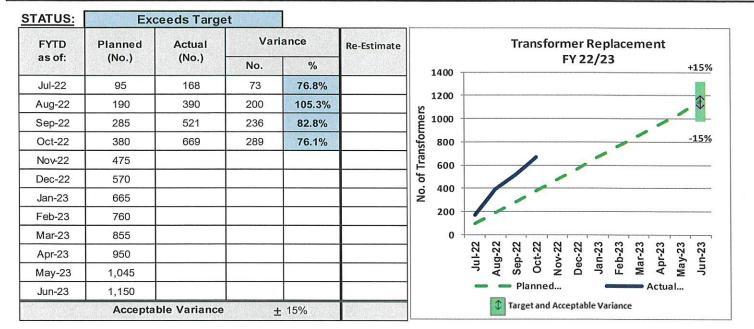
 Power Transmission and Distribution (PTD) management will monitor this FI and address any variations.

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: October 2022

DEFINITION OF RATES METRIC: Number of Transformers Replaced Against Plan TARGET & ACCEPTABLE VARIANCE (FY 22/23): Target = 1,150; Acceptable Variance = ± 15%



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

BACKGROUND / PURPOSE 1.

- Replace 1,150 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 1,100 • 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) for a combined total of 1.150. 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, includes replacement.

3. **ACHIEVEMENTS / MILESTONES MET**

- To date, the target was to replace 380 transformers • and the current actual number of transformers replaced is 669. Through the month of October, **Distribution Construction & Maintenance completed** 669 transformer replacements. The goal is to complete 1,150 transformer replacements for Fiscal Year 22/23.

4. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- The actual number of transformers replaced exceeds the ±15% threshold due to heat storms.
- Transformers are replaced after failure, overload condition, or when regular scheduled maintenance is required. The transformers are counted after being replaced whether due to heat or scheduled work.

MITIGATION PLAN AND / OR 5. 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.
- The Division will continue to replace transformers that have been targeted for replacement, but not at the amount we were doing this past summer. PTD is constantly monitoring the transformers and evaluating what needs to be replaced. Weather conditions may change throughout the year, affecting the amount of activity in any given month.

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 **EQUITY CORE CATEGORY:** Water and Power Infrastructure Investment REPORTING PERIOD: October 2022

DEFINITION OF RATES METRIC: Number of Poles Replaced Against Plan TARGET & ACCEPTABLE VARIANCE (FY 22/23): Target = 3,500; Acceptable Variance = ± 15%

FYTD	Planned	Actual	Vari	iance	Re-Estimate	Pole Replacement
as of:	(No.)	(No.)	No.	%		FY 22/23
Jul-22	292	476	184	63.0%		4500 +159
Aug-22	583	967	384	65.9%		3500
Sep-22	876	1,232	356	40.6%		
Oct-22	1,168	1,567	399	34.2%		§ 3000
Nov-22	1,549					δ 2000
Dec-22	1,752					2 1500
Jan-23	2,043					1000
Feb-23	2,335					500
Mar-23	2,628					0 +
Apr-23	2,919					JULA NOS SEP OCTANOVA DEC DERA NOTAS POR MOTAS JURAS
May-23	3,212					
Jun-23	3,500					Planned Actual

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 rotten.
- 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 1,168 poles and the current actual number of poles replaced is 1,567.

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

- The number of poles replaced exceeds the acceptable ±15% threshold.
- Replacements will vary month to month due to some jobs taking over a month to complete and the availability of crews.

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

 PTD will continue to monitor the job as the year progresses and will adjust priorities and resources accordingly to ensure end of FY 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.

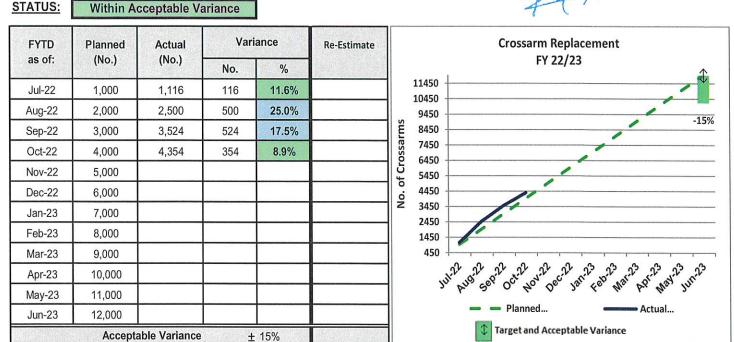
Exceeds Target

LADWP RATES METRIC - *Crossarm Replacement (Power)*

RESPONSIBLE MANAGER: Ruben Hauser, Power Transmission and Distribution

REPORTING PERIOD: October 2022

DEFINITION OF RATES METRIC: Number of Crossarms Replaced Against Plan TARGET & ACCEPTABLE VARIANCE (FY 22/23): Target = 12,000; Acceptable Variance = ± 15%



SOURCE OF DATA: Jobs P6318 (KPI #04.01.01.21)

1. BACKGROUND / PURPOSE

Replace 12,000 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 4,000 crossarms and the current actual number of crossarms replaced is 4,354 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 acceptable ±15% threshold.
- PTD constantly monitors crossarm replacement 0 activity and adjusts work and resources as needed throughout the year.
- Division's focus changes with the weather and operating needs. During the summer months, crossarm replacements decrease due to the majority of field crews focused on replacing overload transformers due to heat storms and fall winds.
- PTD was more accurate in capturing completed work using WMIS while 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 FY target goals for all our KPI's.

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 Vincent Zabukovec REPORTING PERIOD: October 2022

80

70 60 50

Power Engineering and Technical Services Division EQUITY CORE CATEGORY: Water & Power Infrastructure Investment

Cable Replacement, Capital FY 22/23

DEFINITION OF RATES METRIC: No. of Miles of Cable Replaced Against Plan TARGET & ACCEPTABLE VARIANCE (FY 22/23): Target = 60 miles; Acceptable Variance = ±15%

STATUS: Within Acceptable Variance

FYTD	Planned	Actual	Varia	ance	Re-Estimate			
as of:	(Mile)	(Mile)	Mile	%				
Jul-22	5.0	2.2	-2.8	-56.0%				
Aug-22	10.0	4.0	-6.0	-60.0%				
Sep-22	15.0	11.7	-3.3	-22.0%				
Oct-22	20.0	18.1	-1.9	-9.5%				
Nov-22	25.0				25.0			
Dec-22	30.0				30.0			
Jan-23	35.0				35.0			
Feb-23	40.0				40.0			
Mar-23	45.0				45.0			
Apr-23	50.0				50.0			
May-23	55.0				55.0			
Jun-23	60.0				60.0			
	Acceptable Variance ± 15%							

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

1. NARRATIVE / BACKGROUND

Cable replacement of 4.8-kV and 34.5-kV cables for additional system reliability due to deterioration, overload, obsolescence and damage.

2. CRITERIA

- Frequency of failures
- Cable age
- Physical deteriorations: cracks, bulging

ACHIEVEMENTS 3.

• Through the month of October, Distribution Construction & Maintenance completed 18.1 circuit-miles. The goal is to complete 60 circuitmiles for Fiscal Year 22/23.

PERFORMANCE/VARIANCE ANALYSIS & YEAR 4. END PROJECTION

Variance through the month of October is 1.9 circuit-miles, 9.5% below target. Variance is due to District crews focusing on other priorities in previous months on summer outages, customer line extension work, conversion work and relocation work. Additionally, District crews need to close completed jobs and finalize jobs close to completion. Actual circuit-miles recorded are expected to be closer to the target goal when the

Outside Acceptable Variance

Within Acceptable Variance

District crews close the completed jobs. However, in this past month, crews have focused on cable replacement jobs due to failures and splice/cable degradation which decreases the variance for this month. Expenditures for cable replacement have incurred \$6.4M overrun in the corresponding budget in Lead & Synthetic 4.8kV & 34.5kV Cable Replacement (Job P6306). Overrun is caused by cable replacement jobs requiring installation of new conduit and underground structures which incur increased material costs and labor hours.

Nov-22 Dec-22 Jan-23

Target and Acceptable Variance

Sepö Planned...

۰t

5. MITIGATION/RECOMMENDATION

- Distribution circuit design engineers are continuing to compile lists of cable replacement jobs under construction, identifying which jobs are completed or close to being completed and working with District crews to close the completed jobs.
- Contract Operations crews will assist in completing cable replacement jobs.

6. OUTREACH STRATEGY / PLAN

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

23

+15%

-15%

Jun-23

Apr-23 May-23

Actual...

Mar-23 Feb-23

CJB



LADWP RATES METRIC - Average Unit Cost per Transformer [Power]

RESPONSIBLE MANAGER: David Hanson, Power Transmission and Distribution 1, All REPORTING PERIOD: October 2022

DEFINITION OF RATES METRIC: Average Unit Cost per Transformer

Exceeds Target

STATUS:

TARGET & ACCEPTABLE VARIANCE (FY 22/23 Target = \$10.1K per transformer: Acceptable Variance = ± 15%

Approved Variance Avg Cost per Transformer FYTD **Re-Estimate** Budget / Actual as of: FY 22/23 (If Applicable) Planned Unit or \$ % 20 Jul-22 10.1 6.1 (4.0)-39.6% Aug-22 10.1 5.9 (4.2)-41.6% 15 Sep-22 10.1 6.6 (3.5)-34.7% +15% \$ per Unit Oct-22 10.1 7.3 (2.8)-27.7% 10 Nov-22 10.1 Dec-22 10.1 -15% 5 Jan-23 10.1 Feb-23 10.1 0 Mar-23 10.1 AU9:22 Octill 404.22 Decili Janias Febras Marils 141-22 Sepill APIZZ Mayili Jun 23 Apr-23 10.1 May-23 10.1 Approved Budget / Planned Actual Jun-23 10.1 Target and Acceptable Variance **Acceptable Variance** ± 15%

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

1. BACKGROUND / PURPOSE

 Identify and replace 1,150 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 \$10.1K per unit.

2. ACHIEVEMENTS / MILESTONES MET

 As of October 31, the target was to replace 380 transformers at 33.0% of the fiscal year-end goal. PTD has completed replacement of 669 transformers, which is 58.2% of the fiscal year goal with a current average cost of \$7.3K per unit.

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

• PTD is exceeding the target and there is a variance of \$2.8K per unit. For the month of October, the average cost is \$7.3K, which is 27.7% under the planned target. Variance is outside the acceptable target due to the number of transformer replacements completed above target.

 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.

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

- 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.

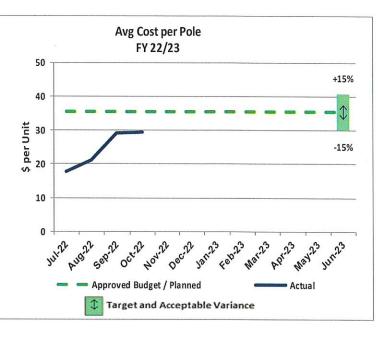
LADWP RATES METRIC – Average Unit Cost per Pole IPower1

RESPONSIBLE MANAGER: David Hanson, Power Transmission and Distribution REPORTING PERIOD: October 2022

DEFINITION OF RATES METRIC: Average Unit Cost per Pole

TARGET & ACCEPTABLE VARIANCE (FY 22/23): Target = \$35.6K per pole: Acceptable Variance = ± 15%

TATUS:	Exc	eeds Targ	et			
FYTD	Approved Budget /	Actual	Varia	Variance		
as of:	Planned		Unit or \$	%	(If Applicable)	
Jul-22	35.6	17.9	(17.7)	-49.7%		
Aug-22	35.6	21.1	(14.5)	-40.7%		
Sep-22	35.6	29.3	(6.3)	-17.7%		
Oct-22	35.6	29.5	(6.1)	-17.1%		
Nov-22	35.6					
Dec-22	35.6					
Jan-23	35.6					
Feb-23	35.6					
Mar-23	35.6					
Apr-23	35.6					
May-23	35.6					
Jun-23	35.6					
	Acceptat	ole Varianc	9 <u>+</u>	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 \$35.6K per unit.

2. ACHIEVEMENTS / MILESTONES MET

 As of October, our current to date target was a replacement of 1,168 power poles at 33.0% of the fiscal year goal. PTD has completed replacement of 1,567 power poles, which is 45% of the fiscal year goal with a current average cost of \$29.5 per unit.

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

 PTD's Contract Operations personnel, which includes outside contractors, is exceeding the target and there is a variance of \$6.1K per unit. For the month of October, the average cost is

Within Acceptable Variance

Outside Acceptable Variance

\$29.5K, which is 17.1% under the planned target.

- 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 17.1% under the target replacement cost and outside 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.

Exceeds Target

Needs Attention

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

- PTD will monitor and audit unit costs in addition to working with Power Transmission Planning, Regulatory, 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.

LADWP RATES METRIC - Average Unit Cost per Crossarm [Power]

RESPONSIBLE MANAGER: David Hanson, Power Transmission and Distribution MUL REPORTING PERIOD: October 2022

DEFINITION OF RATES METRIC: Average Unit Cost per Crossarms TARGET & ACCEPTABLE VARIANCE (FY 22/23): Target = \$1.2K per crossarm: Acceptable Variance = ± 15%

STATUS:	Within	Acceptable Va	ariance				
FYTD	Approved Budget /	Actual	Varia	Variance			
as of:	Planned		Unit or \$	%	(If Applicable)		
Jul-22	1.2	1.4	0.2	16.7%			
Aug-22	1.2	1.1	(0.1)	-8.3%			
Sep-22	1.2	1.1	(0.1)	-8.3%			
Oct-22	1.2	1.2	0.0	0.0%			
Nov-22	1.2						
Dec-22	1.2						
Jan-23	1.2						
Feb-23	1.2						
Mar-23	1.2						
Apr-23	1.2						
May-23	1.2						
Jun-23	1.2						

SOURCE OF DATA: Jobs P6318 (KPI # 04.01.01.73)

1. BACKGROUND / PURPOSE

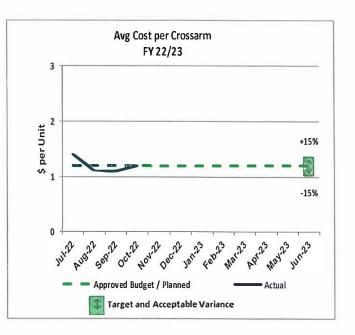
 Replace 12,000 deteriorated crossarms due to age or other damage. Power Transmission and Distribution (PTD) maintains approximately 321,000 poles that usually support one or more crossarms. These crossarms support conductors at different voltage levels, transformers, switches, light fixtures, communication cables, etc. PTD has a target replacement cost of \$1.2K per unit.

2. ACHIEVEMENTS / MILESTONES MET

 As of October, our current to date target is to replace 4,000 crossarms, which is 33% of the fiscal year goal. PTD has completed the replacement of 4,354 crossarms, which is 36% of the FY goal, with a current average cost of \$1.2K per unit.

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

• PTD is within the acceptable variance and there is no variance per unit. For the month of October, the average cost is \$1.2K, which is on target. Crossarm replacement costs will fluctuate depending on the difficulty factor of the crossarm replacement. Contributing factors can



26

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.

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

- 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.

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

2000

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RESPONSIBLE MANAGER: David Hanson, Power Transmission and Distribution **REPORTING PERIOD: October 2022**

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

TARGET & ACCEPTABLE VARIANCE (FY 22/23): Target = \$1,407.4 per mile of cable replaced; Acceptable Variance = ± 15%

FYTD as of:	Approved Budget /	Actual	Varia	ince	Re-Estimate
	Planned		Unit or \$	%	(If Applicable)
Jul-22	1,407.4	1,777.3	369.9	26.3%	
Aug-22	1,407.4	2,586.8	1,179.4	83.8%	
Sep-22	1,407.4	1,408.3	0.9	0.1%	
Oct-22	1,407.4	1,418.7	11.3	0.8%	
Nov-22	1,407.4				
Dec-22	1,407.4				
Jan-23	1,407.4				
Feb-23	1,407.4				
Mar-23	1,407.4				
Apr-23	1,407.4				
May-23	1,407.4				
Jun-23	1,407.4				
	Acceptal	ole Variance	ə +	15%	

BACKGROUND / PURPOSE

Replace 60 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 \$1,407.4K per mile.

2. ACHIEVEMENTS / MILESTONES MET

PTD's annual target is replacement of 60 miles of cable. The actual cable replacement accounted for in October totals 18.1 miles.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- Average cost per mile of cable is \$1.418.7K which is within the acceptable target for the month of October.
- Multiple 4.8kV and 34.5kV cable replacement projects have been completed in the month of October. With Task 145 completed in Work Management Information System (WMIS), cable mileage for these projects can be accounted for in correlation with past labor and material charges.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

Approved Budget / Planned

Target and Acceptable Variance

octili 404.22 Decili Jani23

Sel

PTD will monitor job performance and ensure that time, materials, and labor are being accounted for accurately and appropriately.

Febras

Marila

Avg Cost per Mile of Cable FY 22/23

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.

+15%

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-15%

Mayins

Actual

LADWP RATES METRIC – *Distribution Automation (Power)*

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

REPORTING PERIOD: October 2022

DEFINITION OF RATES METRIC: Board Approved Annual Budget vs. Actual Expenditures For Distribution Automation, Capital **TARGET & ACCEPTABLE VARIANCE (FY 22/23):** Target = \$25,900K; Acceptable Variance = ± 15%

STATUS: Outside Acceptable Variance

FYTD	Approved Budget	Actual	Varia	ince	Re-Estimate	Distribution Automation, Capital FY 22/23
as of:	(\$ in K)	(\$ in K)	\$ in K	%		35000
Jul-22	2,158.0	573.0	(1,585.0)	-73.4%		+15%
Aug-22	4,316.0	1,551.0	(2,765.0)	-64.1%		30000
Sep-22	6,474.0	2,893.0	(3,581.0)	-55.3%		25000
Oct-22	8,633.0	4,352.0	(4,281.0)	-49.6%		<u>≥</u> 20000 -15%
Nov-22	10,790.0					-15%
Dec-22	12,948.0					10000
Jan-23	15,106.0					
Feb-23	17,264.0					5000
Mar-23	19,422.0					
Apr-23	21,580.0					July Rug 2 20 . Oct. Nov. Dec. Jam & Brit & May July
May-23	23,738.0					
Jun-23	25,900.0					Actual
	Acceptab	le Variance	±	15%		Target and Acceptable Variance

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 the end of 2024, 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

Milestones:

- Installation of Communication Equipment
- Construction of DS-36 Equipment
- Complete System Integration

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

• The program initially experienced delays with communication equipment delivery, and installations. This was due to late receipt from vendors, and global supply chain issues. Supply chain issues continue to pose potential challenges in the case of project change orders. Installations ramped up with the addition of new staff to

Within Acceptable Variance

Outside Acceptable Variance

installation crews. There is a current hold on the integrations project/tasks which is adding to the variance.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

• Additional equipment orders were made for mitigating potential supply chain issues. The program continues to look into areas where extra staffing could help to expedite project tasks.

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Exceeds Target

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

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

REPORTING PERIOD: October 2022

DEFINITION OF RATES METRIC: Distribution Automation Project Progress Against Schedule (Target as %) **TARGET & ACCEPTABLE VARIANCE (FY 22/23):** Target = Complete Equipment Installations by June 2023. Variance = N/A

STATUS INFORM

INFORMATION ONLY

Project Milestones	Target Dates	Status
Installation of Pole-Top	FY 22/23 2nd Qtr.	
Communication Equipment	(October 2022 –	In Progress
Completed	December 2022)	
Complete System Integration Completed	FY 22/23 3rd Qtr. (January 2023 - March 2022)	In progress
Construction of DS-36 Completed	March 2023) FY 22/23 4th Qtr. (April 2023 - June 2023)	In Progress

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 the end of 2024, 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 875 pole-top communication equipment installed.

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

• The program initially experienced delays with communication equipment delivery, and installations. This was due to late receipt from vendors, and global supply chain issues. Supply chain issues continue to pose potential challenges in the case of project change orders. Installations ramped up with the addition of new staff to installation crews.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

• Additional equipment orders were made for mitigating potential supply chain issues. The program continues to look into areas where extra staffing could

Within Acceptable Variance

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help to expedite project tasks. There is a current hold on

the Complete System Integrations project/tasks.

Water System

LADWP RATES METRIC - WATER DISTRIBUTION INFRASTRUCTURE POSITIONS (Water)

RESPONSIBLE MANAGER: Breonia Lindsey/Sandra Foster

REPORTING PERIOD: October 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 22/23): Vacant budgeted Water Distribution Infrastructure field positions at 86 or less by the end of the fiscal year/, ±15%

STATUS: Within Acceptable Variance

FYTD	Planned	Actual	Varia	nce	Re-Estimate			Distribution Infrastructure Vacant Positions FY 22-23
as of:	Vacancies	Vacancies	# Vacancies	%	(If Applicable)		140 –	1122-23
Jul-22	119	119	0	0.0%		s l		
Aug-22	123	123	0	0.0%		tion	120 -	+15%
Sep-22	120	120	0	0.0%		Posi	100 -	
Oct-22	116	121	5	4.3%		ant	80 -	
Nov-22	112					of Vacant Positions	60 -	-15%
Dec-22	108							
Jan-23	104					Number	40	
Feb-23	100					ב ב	20 -	
Mar-23	96						o +	
Apr-23	92						IUI	hus ser oct how been san to have be had in it
May-23	88						5	
Jun-23	86						-	Planned Vacancies Actual Vacancies
	Acceptab	le Variance	±	15%				Target and Acceptable Variance

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 86 vacancies or less by the end of the fiscal year.

2. ACHIEVEMENTS/MILESTONES MET

 The Division continues hiring infrastructure employees in fiscal year 2022/23, filling existing vacancies in critical infrastructure crews.

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

 Current rate of hiring budgeted positions is within the acceptable variance. The Division will continue targeted hiring efforts to reduce the number of vacant budgeted Water Distribution field positions to 86 or less by the end of the fiscal year to ensure adequate staffing dedicated to infrastructure replacement.

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

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

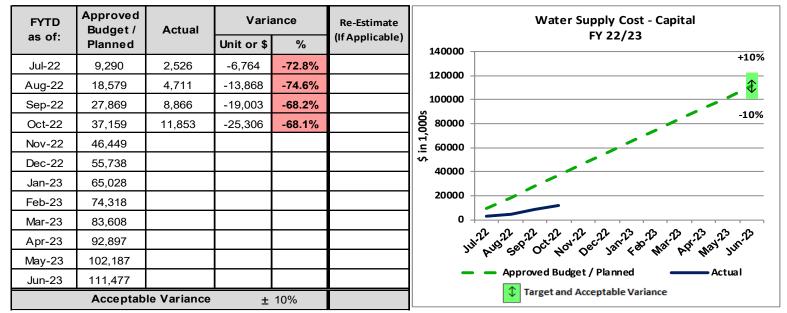
LADWP RATES METRIC – WATER SUPPLY COST BUDGET VS ACTUAL-Dora Masse CAPITAL (Water)

RESPONSIBLE MANAGER: April Thang *DRP*

REPORTING PERIOD: October 2022

DEFINITION OF RATES METRIC: Board approved annual budget vs actual expenditures. **TARGET & ACCEPTABLE VARIANCE (FY 22/23):** \$111,477K, ±10 percent

STATUS: Outside Acceptable Variance



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

1. BACKGROUND / PURPOSE

- Water supply costs include both current supply of water 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 September 2022, groundbreaking for underground infrastructure work, such as pipe and electrical conduits, has started for the Van Norman Exploratory Wells project.
- 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. <u>PERFORMANCE / VARIANCE ANALYSIS</u> <u>& YEAR END PROJECTION</u>

- Watershed Stormwater Capture jobs are contributing to the underrun. The Stormwater Capture Parks Program, which consists of 9 individual park jobs, is experiencing delays related to the implementation of the Memorandum of Agreements with Los Angeles Sanitation (LASAN). The negotiation has been escalated to both the LADWP and LASAN Board of Commissioners and a resolution is expected by February 2023.
- Water Recycling Capital jobs are contributing to the underrun. The Harbor Refineries and Harbor Industrial Onsite Improvements projects are actively being worked on to support the expansion of the recycled water system in the Harbor area. There has been a delay in processing invoices for these capital projects; however, they are currently being processed.

Exceeds Target

 Water Conservation Water Funded jobs are contributing to the underrun. There was a significant decrease in demand for commercial and residential rebates from our customers. In addition, the continued impact of COVID-19 on all in-house direct install programs with other participating utilities, and the expiration of the Gas Company partnership contract have contributed to the underrun. The contract with the Gas Company is being negotiated and expected to be effective January 2023.

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

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



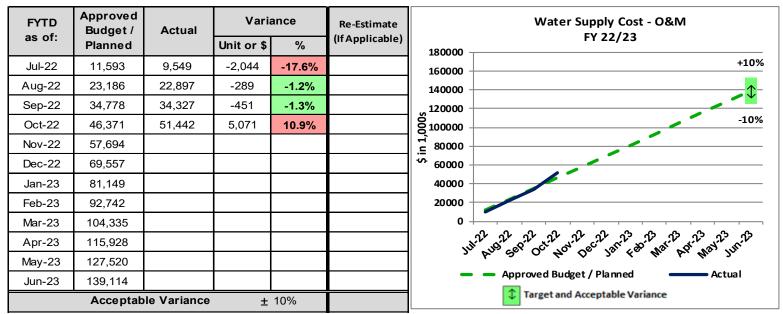
LADWP RATES METRIC – WATER SUPPLY COSTS BUDGET VS ACTUAL-Dora Masse 0&M (Water)

RESPONSIBLE MANAGER: April Thang

REPORTING PERIOD: October 2022

DEFINITION OF RATES METRIC: Board approved annual budget vs actual expenditures. **TARGET & ACCEPTABLE VARIANCE (FY 22/23):** \$139,114K, ±10 percent

STATUS: Outside Acceptable Variance



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

1. BACKGROUND / PURPOSE

- 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 105 preventative maintenance tasks for 96 pump station facilities and 95 regulatory bi-weekly maintenance on 45 emergency backup IC Engine units located throughout the Water System.

 There have been three complete retrofits at the Valley and Metro Pressure Regulating Stations.

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

 The YTD overrun is primarily due to the Water Recycling O&M job, related to Hyperion AWPF construction MOU payments to Los Angeles Sanitation (LASAN). Typically, there are delays in receiving invoices from LASAN. Several invoices were processed for work performed last fiscal year (April 2022 and June 2022).

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

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

33

LADWP RATES METRIC – Purchased Water (Water)

RESPONSIBLE MANAGER: April Thang Dora Masse

REPORTING PERIOD: October 2022

DEFINITION OF RATES METRIC: Annual quantity of purchased water in acre-feet (AF). Information only. **TARGET & ACCEPTABLE VARIANCE (FY 22/23):** N/A - for information only

STATUS:	Information Only				
FYTD as of:	Actual	Purchased Water FY 22/23			
Jul-22	32,420	140,000			
Aug-22	63,645	120,000			
Sep-22	85,831	100,000			
Oct-22	120,503	ta 80,000			
Nov-22		80,000			
Dec-22		40,000			
Jan-23		20,000			
Feb-23		o			
Mar-23		JULY AUGH SEPT OCHIL NOW DECK JAMA RANG APH NAVY JUMA			
Apr-23		$2 b_2 \partial_2 O b_2 \partial_2 \partial_3 \delta_3 \delta_1 b_2 \delta_1 \partial_2 \partial_3 \delta_2 \delta_1 \delta_2 \delta_2 \delta_1 \delta_2 \delta_2 \delta_1 \delta_2 \delta_2 \delta_2 \delta_1 \delta_2 \delta_2 \delta_2 \delta_1 \delta_2 \delta_2 \delta_2 \delta_1 \delta_2 \delta_$			
May-23		Actual			
Jun-23					

SOURCE OF DATA: Monthly Metropolitan Water District invoices.

1. BACKGROUND / PURPOSE

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

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

- 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.

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

- 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.

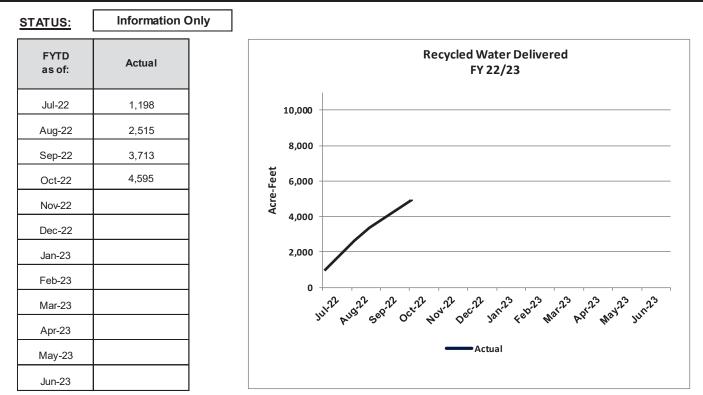
34

LADWP RATES METRIC - RECYCLED WATER DELIVERED (Water)

RESPONSIBLE MANAGER: Jesus Gonzalez

REPORTING PERIOD: October 2022

DEFINITION OF RATES METRIC: Annual quantity of purchased water in acre-feet (AF). Information only. **TARGET & ACCEPTABLE VARIANCE (FY 22/23):** N/A - for information only



SOURCE OF DATA: Customer Recycled Water Meter Reads

1. BACKGROUND / PURPOSE

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

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

• Not applicable - for information only.

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

- 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.

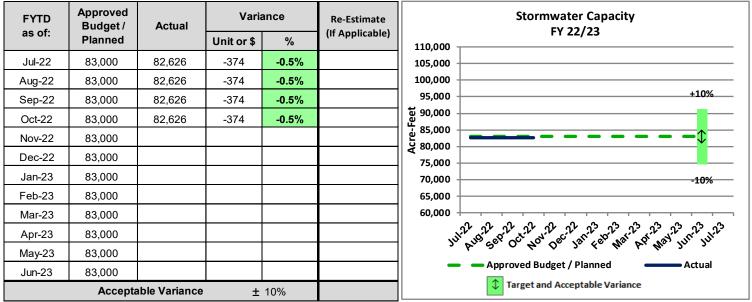
LADWP RATES METRIC - STORMWATER CAPACITY (Water)

RESPONSIBLE MANAGER: David R. Pettijohn

REPORTING PERIOD: October 2022

DEFINITION OF RATES METRIC: Stormwater system capacity milestones in acre-feet (AF) against plan. **TARGET & ACCEPTABLE VARIANCE (FY 22/23):** 83,000 AFY; 10% variance

STATUS: Within Acceptable Variance



SOURCE OF DATA: Summary of Major Stormwater Capture Projects Report

1. BACKGROUND / PURPOSE

- Projects to meet the 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 longterm native safe yield of the City's local groundwater supply.

2. ACHIEVEMENTS / MILESTONES MET

- Projects in construction include:
 - Pacoima Spreading Grounds Improvement Project (5,300 AFY), 35% complete.
 - San Fernando Regional Park Infiltration Project (446 AFY), 15% complete.

- Projects in design/planning include:
 - 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. <u>PERFORMANCE / VARIANCE ANALYSIS</u> <u>& YEAR END PROJECTION</u>

• On target.

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

• Continue ongoing work as planned.

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

RESPONSIBLE MANAGER: Wendy McGhie

REPORTING PERIOD: October 2022

LA Aqueduct Budget vs Actual - Capital FY 22/23

13 80-12 Mar.2

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

TARGET & ACCEPTABLE VARIANCE (FY 22/23): \$34,159, 10 percent

STATUS: Outside Acceptable Variance

	Re-Estimate	ance	Vari	Actual	Approved Budget /	FYTD	
40000	(If Applicable)	%	\$		Planned	as of:	
35000		-38.4%	-1,094	1,753	2,847	Jul-22	
		-52.5%	-2,989	2,704	5,693	Aug-22	
30000		-49.8%	-4,254	4,286	8,540	Sep-22	
5000 25000 1 20000		-47.0%	-5,353	6,033	11,386	Oct-22	
) ^{(†} 20000					14,233	Nov-22	
.⊑ \$ 15000					17,079	Dec-22	
10000					19,926	Jan-23	
5000					22,773	Feb-23	
0					25,619	Mar-23	
2					28,466	Apr-23	
3					31,312	May-23	
-					34,159	Jun-23	
		10%	±	e Variance	Acceptabl		

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

1. BACKGROUND / PURPOSE

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

2. ACHIEVEMENTS / MILESTONES MET

- Laws planting project is 50% complete. Approximately 7000 native shrubs and grasses planted.
- Phase 3 of the Cascades Relining Project is nearing completion.
- Designs for the Grant Lake Spillway project have been updated and are approximately 95% complete. Construction is anticipated to begin early 2024.

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

Non Decil with

Approved Budget / Planned

Target and Acceptable Variance

octili

 Aqueduct Capital is expected to be slightly below the FY 22-23 target at fiscal yearend. Several capital projects, such as the North Haiwee Dam Project, Grant Lake Roto Valve and Spillway Projects, have been postponed due to additional Scope of Work or delays in planning and permitting,

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

 Continue to work with Water Engineering and Technical Services, and Power Construction and Maintenance to move projects forward. +10%

-10%

Actual

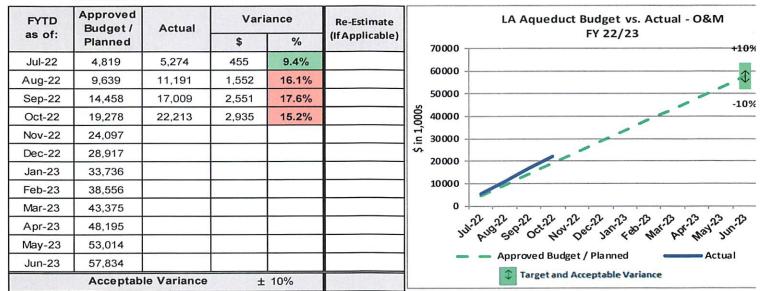
LADWP RATES METRIC – LA AQUEDUCT BUDGET VS ACTUAL – O&M (Water) w

RESPONSIBLE MANAGER: Wendy McGhie

REPORTING PERIOD: October 2022

DEFINITION OF RATES METRIC: Board approved annual budget vs actual expenditures. TARGET & ACCEPTABLE VARIANCE (FY 22/23) \$57,834, 10 percent

STATUS: Outside Acceptable Variance



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 220 acres for resource clearing; •
- Graded 215 miles of roads; •
- Mowed 75 miles of canals and ditches: .
- Cleaned 27 miles of canals and ditches; •
- Installed 3 miles of fencing; .
- Installed 19 data logger/station retrofits.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

Aqueduct continues to focus on operations and maintenance work as several Capital projects are delayed. Thus, crews have been able to perform substantial O&M and resource management. We expect to be slightly above budgeted levels at Fiscal Year End due to ongoing summer flood clean-up efforts.

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 22/23.

Exceeds Target

+10%

LADWP RATES METRIC – GALLONS PER CAPITA PER DAY (GPCD)(Water) Delon Kwan RESPONSIBLE MANAGER: Terrence McCarthy

for TM 11-22-2022 REPORTING PERIOD: October 2022

GPCD FY 22/23

DEFINITION OF RATES METRIC: Level of water conservation against target GPCD. TARGET & ACCEPTABLE VARIANCE (FY 22/23): 106 GPCD & 10% Acceptable Variance

STATUS: Within Acceptable Variance

FYTD	Approved Budget /	Actual	Vari	ance	Re-Estimate of			
as of:	Planned		GPCD	%	Budget/Planned			
Jul-22	106	112	6	5.3%				
Aug-22	106	111	5	4.5%				
Sep-22	106	110	4	3.7%				
Oct-22	106	110	4	3.4%				
Nov-22	106							
Dec-22	106							
Jan-23	106							
Feb-23	106							
Mar-23	106							
Apr-23	106							
May-23	106							
Jun-23	106							
Assertable Variance (100/								

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.

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

- Monthly customer water per capita use continues to decrease due to effective drought messaging and Phase III restriction adoption by customers.
- 12-month rolling GPCD is anticipated to remain the same or decrease as a result of continued conservation efforts despite potential of dry winter conditions. October 2022 was slightly warmer and drier than October 2021.
- 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.

Marili

Actual

Way

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LADWP has seen a 9% decrease in supply deliveries compared to October 2021.

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Target and Acceptable Variance

Le Al Oct A

Approved Budget / Planned

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.





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

Dora Masso

REPORTING PERIOD: October 2022

DEFINITION OF RATES METRIC: Board approved annual budget vs actual expenditures. TARGET & ACCEPTABLE VARIANCE (FY 22/23): \$370,874K, 10 percent

Outside Acceptable Variance STATUS:

RESPONSIBLE MANAGER: April Thang

FYTD	Approved Budget /	Actual	Varia	ance	Re-Estimate	Fixed Assets Replacement Budget	
as of:	Planned		\$	%	(If Applicable)	FY 22/23	
Jul-22	30,906	22,927	-7,979	-25.8%		400000	
Aug-22	61,811	52,473	-9,338	-15.1%		350000	
Sep-22	92,717	80,205	-12,512	-13.5%		<u>v</u> 300000 -109	
Oct-22	123,623	107,259	-16,364	-13.2%		-109 8250000	
Nov-22	154,528						
Dec-22	185,434					v [*] 150000	
Jan-23	216,340					100000	
Feb-23	247,245					50000	
Mar-23	278,151					0 +	
Apr-23	309,057					July And Bedy Carly Non Decy Party - Mary Ady 13 11, 13	
May-23	339,962						
Jun-23	370,874					Approved Budget / Planned Actual	
	Accepta	ble Variance	±	10%		Target and Acceptable Variance	

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

1. BACKGROUND / PURPOSE

This metric tracks the Water System's ٠ 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 October 2022:

- 63,104 feet of mainline have been installed.
- 8,948 feet of trunk line have been replaced.
- 6 pumps have been replaced/retrofitted.
- 3 Regulators/Relief Stations have been retrofitted.
- 144 new fire hydrants have been installed.
- DWP completed field investigation for the Final Planning Study of the Tinemaha Dam Replacement Project. The final report is expected in March 2023.
- DWP completed construction report and secured the Division of Safety of Dams' (DSOD) approval for filling the Green Verdugo Reservoir.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- The rate of Fixed Assets Replacement was outside acceptable variance for the reporting period.
- There have been delays in receiving and processing invoice payments for infrastructure Reservoir Improvements and Trunk Line and Major System Connect projects at the beginning of the fiscal year. Water Engineering and Technical Services Division is currently catching up on the pending invoices.
- The Redmont Pump Stations and Replacement's project design is currently being updated to incorporate Water Operation Division's guidelines, which has impacted the start of Power Construction and Maintenance (PCM) services and pushed out constructions to next fiscal year. The budget will be re-estimated to align with anticipated fiscal year-end expenditures.

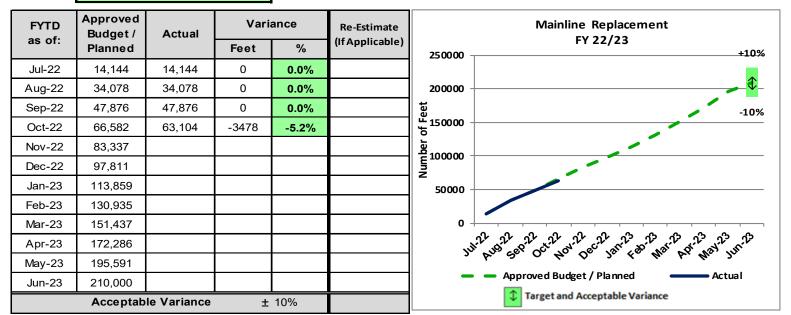
4. <u>MITIGATION PLAN AND / OR</u> <u>RECOMMENDATIONS</u>

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

LADWP RATES METRIC – MAINLINE REPLACEMENT (Water) RESPONSIBLE MANAGER: Breonia Lindsey/Sandra Foster SF REPORTING PERIOD: October 2022

DEFINITION OF RATES METRIC: Feet of mainline replaced against plan. TARGET & ACCEPTABLE VARIANCE (FY 22/23): 210,000 feet, ±10%

STATUS: Within Acceptable Variance



SOURCE OF DATA: FI 26331, Job 30067

1. BACKGROUND / PURPOSE

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

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

REPORTING PERIOD: October 2022

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.

2. ACHIEVEMENTS / MILESTONES MET

As of October 2022, the Division has replaced 63,104 feet of mainline.

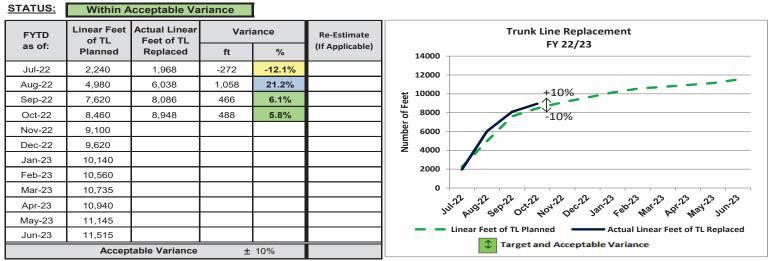
4. MITIGATION PLAN AND / OR RECOMMENDATIONS

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: Milad Taghavi Milad Taghavi Milad Taghavi Milad Taghavi Milad Taghavi MS 12/12/2022REPORTING PERIOD: October 2022

DEFINITION OF RATES METRIC: Feet of trunk line replaced against the plan. **TARGET & ACCEPTABLE VARIANCE (FY 22/23):** 11,515 feet, 10 percent



SOURCE OF DATA: FI 23222 - Jobs 23117, 23435, 23515; FI 26220 - Jobs 23095, 23213, 23137, 23528.

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.

2. ACHIEVEMENTS / MILESTONES MET

- 270 feet of trunk line was installed on City Trunk Line South Unit 3 through September 2022.
- 5,884 feet of trunk line was installed on River Supply Conduit (RSC) Upper Reach Unit 7 Project through October 2022.
- 1,265 feet of trunk line was installed on River Supply Conduit (RSC) Lower Reach Unit 1A Project through October 2022.
- 477 feet of trunk line was installed on City Trunk Line North Unit 2 through October 2022.
- 653 feet of trunk line was installed on Century Trunk Line Unit 1 Phase 1 through October 2022.
- 337 feet of trunk line was installed on Foothill Trunk Line through October 2022.
- 62 feet of trunk line was installed on Coronado Trunk Line through October 2022.

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

 The rate of trunk line replacement is within acceptable variance for the reporting period.

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

 Continue ongoing trunk line replacement projects to meet FY 22/23 goals.

LADWP RATES METRIC – METER REPLACEMENT (Water)

RESPONSIBLE MANAGER: Breonia Lindsey/Sandra Foster

DEFINITION OF RATES METRIC: Number of meters replaced against plan. **TARGET & ACCEPTABLE VARIANCE (FY 22/23):** 33,500 meters, ±10% **REPORTING PERIOD:** October 2022

Approved Variance **Meter Replacement** FYTD Re-Estimate Budget / Actual as of: FY 22/23 (If Applicable) % Planned Meters 40000 10% Jul-22 2,690 0 0.0% 2,690 35000 £ 0.0% Aug-22 5,677 5,677 0 30000 Meters 0.0% Sep-22 7,757 7,757 0 -10% 25000 -1732 Oct-22 10,689 8,957 -16.2% ę 20000 Nov-22 13,260 Number (15000 Dec-22 15,911 10000 18.759 Jan-23 5000 Feb-23 21,360 0 Mar-23 24,292 Sepil 480.12 AU9:22 Marila Aprilis JU1-22 May23 OCT NON DECY DANKS Junits Apr-23 27,264 May-23 30,449 Approved Budget / Planned Actual Jun-23 33.500 £ **Target and Acceptable Variance** Acceptable Variance ± 10%

STATUS: Outside Acceptable Variance

SOURCE OF DATA: FI 27215, Job 30053

1. BACKGROUND / PURPOSE

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

2. ACHIEVEMENTS / MILESTONES MET

 As of October 2022, 8,957 meters of the 33,500 fiscal year goal have been replaced.

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

The rate of meter replacement for this reporting period is outside the acceptable variance. The rate of meter replacement decreased this reporting period as a result of supply chain issues resulting in a meter inventory shortage. Dedicated meter replacement crews were temporarily redeployed to other tasks. However, once additional meter inventory is received, the Division anticipates meeting the meter replacement goal by fiscal year end.

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

 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

Digitally signed by Mild Teghavi Date:2022.11.29 02:2403-0600 MS 11/28/1

MS 11/28/2022 REPORTING PERIOD: October 2022

DEFINITION OF RATES METRIC: Board approved annual budget vs actual expenditures. **TARGET & ACCEPTABLE VARIANCE (FY 22/23):** \$300M, 10 percent

Milad

STATUS: Within Acceptable Variance

RESPONSIBLE MANAGER: Milad Taghavi Taghavi

FYTD	Approved Budget /	Actual (in	Vari	ance	Re- Estimate	Water Quality Budget - Capital	
as of:	Planned (in 1.000)	1,000)	\$	%	(lf Applicable)	FY 22/23	
Jul-22	\$ 24,975	\$ 7,478	17,497	70.1%		300,000	
Aug-22	\$ 49,951	\$ 37,777	12,174	24.4%		300,000	
Sep-22	\$ 74,926	\$ 78,429	-3,503	-4.7%		250,000	
Oct-22	\$ 99,902	\$ 109,237	-9,335	-9.3%		8 200,000	
Nov-22	\$ 124,877					.⊑ 150,000 	
Dec-22	\$ 149,853					+10% 100,000	
Jan-23	\$ 174,828					-10%	
Feb-23	\$ 199,803					50,000	
Mar-23	\$ 224,779						
Apr-23	\$ 249,754					July Brigger oct. Nor Deci Jan 53 12 way July	
May-23	\$ 274,730					~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	
Jun-23	\$ 299,707						
	Acceptab	le Variance	±	10%	Target and Acceptable Variance		

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.

2. ACHIEVEMENTS / MILESTONES MET

- San Fernando Groundwater Basin Remediation (SFGBR) – North Hollywood Centralized Treatment: As of October 2022, construction reached 70% complete.
- SFGBR Tujunga Centralized Treatment: As of October 2022, construction reached 75% complete.
- SFGBR North Hollywood West Wellhead Treatment: As of September 2022, construction reached 93% complete.
- Hyperion Advanced Water Purification Facility (AWPF): As of October 2022, construction reached 75% complete.
- Headworks Flow Control Station: As of September 2022, construction reached 50% complete.
- Fairmont Sedimentation Plant: As of September 2022, Design-Build contract

proposals have been received and the contract is currently in clarification and negotiation stage with the proposed Design-Build Team.

• Headworks Reservoir West: As of August 2022, the reservoir is in-service.

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

• The Water Quality Capital approved budget vs. actual expenditure is within acceptable range for the reporting period.

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

• Continue ongoing work as planned.



LADWP RATES METRIC – WATER QUALITY BUDGET VS ACTUAL-0&M el math' (Water) **RESPONSIBLE MANAGER:** Nelson Mejia

REPORTING PERIOD: October 2022

DEFINITION OF RATES METRIC: Board approved annual budget vs actual expenditures. TARGET & ACCEPTABLE VARIANCE (FY 22/23): \$148,365K, 10 percent

STATUS: Outside Acceptable Variance

FYTD	Approved Budget /	Actual	Vari	ance	Re-Estimate	Water Quality Budget - O&M		
as of:	Planned		\$	%	(If Applicable)	FY 22/23 180000 +10%		
Jul-22	12,364	9,267	-3,097	-25.0%		160000		
Aug-22	24,727	17,913	-6,814	-27.6%		140000		
Sep-22	37,091	29,588	-7,503	-20.2%		-10%		
Oct-22	49,454	37,189	-12,265	-24.8%				
Nov-22	61,818					.£ ⁸⁰⁰⁰⁰		
Dec-22	74,181					40000		
Jan-23	86,545					20000		
Feb-23	98,909							
Mar-23	111,272					July And Bery Corner Decy Bury 28 Hay bring may July		
Apr-23	123,636					m. Pring Ber Oc. Mo. Den Byr tay War by May Int.		
May-23	135,999					- Approved Budget / Planned - Actual		
Jun-23	148,365					Target and Acceptable Variance		

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

1. BACKGROUND / PURPOSE

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

2. ACHIEVEMENTS / MILESTONES MET

Fiscal Year-to-Date

- Water Quality Groundwater O&M completed 1,036 groundwater samplings required for regulatory permits and Prop 1 Grant Program projects.
- Water Quality Control collected 7,201 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 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, 17 hydration stations have been installed through HSIP partnerships with reimbursements totaling \$35,000.
- **Community Outreach-Water Quality** Customer Care supported LADWP's **Community Partnership Outreach Grants** Program in finalizing community grant Memoranda of Understanding for newly selected grantees who will conduct public outreach and education campaigns that promote LADWP's high quality water, and communicate the environmental, health and economic benefits of drinking tap water.

 The water-saving mainline flushing activities are anticipated to begin FY 22/23. Additional operator trainings and trial runs will be performed prior to starting watersaving mainline flushing activities. This was identified as a need in recent trial runs performed using NO-DES for flushing and disinfecting new mainlines.

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

- The underrun in Distribution Reservoir O&M is due to delays in obtaining environmental permits for the Van Norman Complex Mitigation Project.
- The underrun in Filter Plant Operations is due to the gap between a previous and new chemical supply contract during which orders could not be placed. The chemical supply contract was recently reestablished and chemical orders will be placed to meet operational needs as well as to replenish onsite supply.
- The underrun in Water Quality-Groundwater O&M is due to Other Outside Services pertaining to reimbursement to the LASAN for the development of the Hyperion Membrane Bioreactor (MBR) Pilot Project. LADWP assumes a third of the costs as agreed in the MOA. However, invoices are received from LASAN at various times, making it challenging to anticipate the timing of payments.

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

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

LADWP RATES METRIC –BUDGET VS ACTUAL FOR OWENS LAKE 0&M alti [Water]

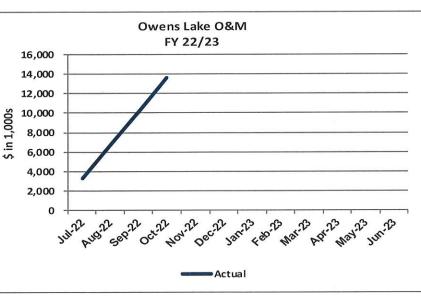
REPORTING PERIOD: October 2022

DEFINITION OF RATES METRIC: Board approved annual budget vs. actual expenditures TARGET& ACCEPTABLE VARIANCE (FY 22/23): N/A - for information only

STATUS: Information Only

RESPONSIBLE MANAGER: Paul Liu

FYTD as of:	Actual
Jul-22	3,327
Aug-22	6,698
Sep-22	10,189
Oct-22	13,638
Nov-22	
Dec-22	
Jan-23	
Feb-23	
Mar-23	
Apr-23	
May-23	
Jun-23	



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 guality in the area.

2. ACHIEVEMENTS / MILESTONES MET

- Owens Lake O&M Staff and personnel from Metro Water Operations completed gopher fumigation maintenance activities in Managed Vegetated dust control areas(DCA) T5, T6, T7, and T8.
- Owens Lake O&M staff completed • fertilization of Managed Vegetated dust Control areas.
- Performed brine, tillage, and gravel maintenance in preparation for the start of the 2022/23 dust season.
- Addressed Shallow Flood compliance . coverage shortfall in areas included within Great Basin's Notice of Comply.
- Analyzed flash flood impacts resulting from 100-year storm event, and Governor's

Within Acceptable Variance

Outside Acceptable Variance

declared state of emergency for the region. In T13-1, T17-1, T17-2N, T17-2S DCAs, a variance for dust control requirements was deemed necessary.

3. PERFORMANCE / VARIANCE ANALYSIS &YEAR END PROJECTION

Not applicable - for information only.

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.

Exceeds Target

Needs Attention

Joint System

LADWP RATES METRIC - Dig Total FTES Against Plan

RESPONSIBLE MANAGER: Robert Meteau, Jr. Kwok

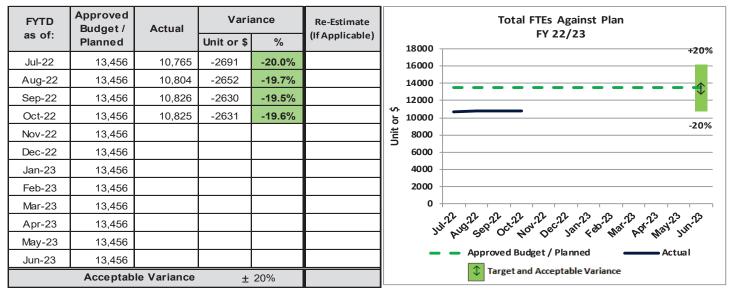
Date: 2022.12.08

REPORTING PERIOD: October 2022

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

TARGET & ACCEPTABLE VARIANCE (FY 22/23): +/- 20%

STATUS: Within Acceptable Variance



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.

2. ACHIEVEMENTS / MILESTONES MET

- External Hires = 25
- Attrition = 17
- Net New Employees = 8

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

The variance is caused by an increased APR for Fiscal Year 22-23. LADWP will continue to remain in the acceptable variance target range as long as occupancy is greater than 10,631 FTEs. The variance is expected to decrease as Power, Water, and Joint Systems fill positions to their approved APR levels.

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

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)** SPONSIBLE MANAGER: Rita Khurana-Carwile Reporting 12/8/2022 REPORTING PERIOD: October, 202

RESPONSIBLE MANAGER: Rita Khurana-Carwile Information Technology Program Management Office **REPORTING PERIOD:** October, 2022

DEFINITION OF RATES METRIC: Board approved annual budget vs. actual expenditures (\$ thousand) TARGET & ACCEPTABLE VARIANCE (FY 22/23): +/-20% of FY 22/23 Board Approved Budget

STATUS: Outside Acceptable Variance

FYTD	Approved Budget	Actual	Vari	ance	Re-Estimate		Financial & Human Resources Replacement Project Total Spending Against Plan
as of:	(\$ in K)	(\$ in K)	\$ in K	%	(If Applicable)	120000	FY 22/23 +15%
Jul-22	8,190.4	1,790.4	-6400	-78.1%			
Aug-22	16,380.8	3,287.1	-13094	-79.9%		100000	
Sep-22	24,571.2	7,165.0	-17406	-70.8%		ස 80000 –	
Oct-22	32,761.6	13,414.4	-19347	-59.1%		sp 60000	-15%
Nov-22	40,952.0					รัก 60000 — อนุ	
Dec-22	49,142.4					ר ג 40000 –	
Jan-23	57,332.8					20000	
Feb-23	65,523.2					20000	· /
Mar-23	73,713.6					o 🕂	
Apr-23	81,904.0					111.22	we can be the part of the part
May-23	90,094.4					2.6	
Jun-23	98,351.8					·	Approved Budget / Planned Actual
	Accepta	ble Variance	±	15%			Target and Acceptable Variance

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 0 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 0 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
- 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

- 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
- Although HR/Pavroll Architect Stage was not signed off many activities for HR/Payroll Configuration and Prototype progressed
- Financial Planning Stage sign-off was delayed pending final review of deliverables
- Although the Financial Planning Stage was not signed off many activities for Financial Architect Stage progressed

4. MITIGATION PLAN AND/OR RECOMMENDATIONS

- 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)
- Architect Stage activities were delayed however no impact to the overall critical path of the project
- HR/Payroll Architect Stage and Financial Planning Stage activities were delayed however no impact to the overall critical path of the project so far. The schedule will be re-baselined as functional teams

make progress with unit testing and future testing timelines can be established based on resource availability.

• Project expenditures continue as milestones are achieved

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

LADWP RATES METRIC – *Financial and Human Resources Replacement* Project Progress Against Schedule (Joint) Rita Khurana-Carwile R. Carwie 12/8/2022 REPORTING

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

REPORTING PERIOD: October 2022

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

TARGET & ACCEPTABLE VARIANCE (FY 22/23): 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 0 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 0 fit SW: "Workday" was selected
 - Stage Two: Piggybacked off City of LA 0 System Integrator (SI) contract with Workday

ACHIEVEMENTS/MILESTONES MET 2.

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

Within Acceptable Variance

Outside Acceptable Variance

- 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
- 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**

- ERP labor expenditures were below approved budgets as hiring for additional positions continues
- HR/Payroll Architect Stage sign-off was delayed pending final review of deliverables & Requirements Traceability Matrix for Unit Testing
- Although HR/Payroll Architect Stage was not signed off many activities for HR/Payroll Configuration and Prototype progressed
- Financial Planning Stage sign-off was delayed pending final review of deliverables
- Although the Financial Planning Stage was not signed off many activities for Financial Architect Stage progressed

Exceeds Target

Needs Attention

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

- 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)
- HR/Payroll Architect Stage and Financial Planning Stage activities were delayed however no impact to the overall critical path of the project far. The schedule will be re-baselined as functional teams make progress with unit testing and future testing timelines can be established based on resource availability.

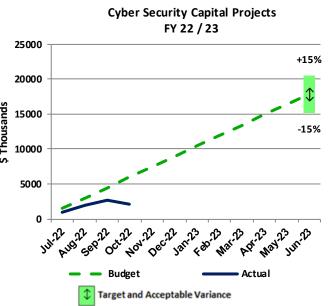
Note: Ivalua SaaS deployment expenses continue to be charged to the ERP Project

LADWP RATES METRIC – Cyber Security Capital Projects (Joint) RESPONSIBLE MANAGER: Stephen Kwok REPORTING PERIOD: October 2022

DEFINITION OF RATES METRIC: Board Approved Annual Budget vs. Actual Expenditures TARGET & ACCEPTABLE VARIANCE (FY 22/23): FY 22/23 Board Approved Budget (+/- 15%)

STATUS: Outside Acceptable Variance

	_					
	Re-Estimate	ance	Vari	Actual	Budget	FYTD
25	(If Applicable)	%	\$ in K	(\$ in K)	(\$ in K)	as of:
		-37.1%	-555	940	1495	Jul-22
20		-34.5%	-1032	1956.9	2989	Aug-22
<u>s</u>		-41.5%	-1862	2621.7	4484	Sep-22
spuesnou 10		-65.0%	-3889	2089.6	5978	Oct-22
no u u u 10					7473	Nov-22
\$ 10					8968	Dec-22
5					10462	Jan-23
					11957	Feb-23
					13451	Mar-23
					14946	Apr-23
					16441	May-23
					17935	Jun-23
		15%	±	le Variance	Acceptab	



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 reengineer LADWP's cybersecurity systems and processes to meet business needs and address potential cyber threats.

2. ACHIEVEMENTS / MILESTONES MET

- Deployment of next generation Network **Detection and Remediation System**
- Re-baseline and optimization of Cyber Security Operation Center
- Finished migration of M365 environment for test groups/pilot users and preparing for mass migration
- Deployment of a number of foundational environments in preparation for digital transformation.
- Implemented new continuous Cyber Awareness Training program

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

A number of invoices (totaling \$2.1M) continue to be outstanding due to billing and contract amendment related issues which are actively being addressed with the vendor. Re-alignment of O&M and Capital Labor costs is being addressed as some of the capital projects have now switched to O&M. A number of new initiatives have been issued as Task Order Request for Proposal (TORP); anticipated engagement to begin second half of FY 22-23.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

We will continue to work with vendors, Supply Chain Services, and Accounts Payable Section to address billing related issues. Additionally, we are exploring additional contracting or purchasing vehicles to allow for additional planned cyber related purchases.

LADWP RATES METRIC – *Customer Information System Upgrades (Joint)*

RESPONSIBLE MANAGER: Annamae Peji

REPORTING PERIOD: October 2022

DEFINITION OF RATES METRIC: Board Approved Annual Budget vs. Actual Expenditures TARGET & ACCEPTABLE VARIANCE (FY 22/23): FY 22/23 Board Approved Budget (+/- 15%)

STATUS: Outside Acceptable Variance

FYTD	Budget	Actual	Vari	ance	Re-Estimate		Customer Information System Upgrades
as of:	Ŭ		Unit or \$	%	(If Applicable)	25000 -	FY 22/23
Jul-22	1442	608.9	-833	-57.8%			+15%
Aug-22	2884	1630.6	-1253	-43.5%		20000 -	
Sep-22	4326	1447.5	-2879	-66.5%		s	_ ↓
Oct-22	5768	3544	-2224	-38.6%		spu 15000 - In 15000 -	
Nov-22	7210					snou 1000	-15%
Dec-22	8652					上 10000 - ふ	
Jan-23	10094					5000 -	
Feb-23	11536						int
Mar-23	12978					0 -	
Apr-23	14420					Jul	We see Oct 20 Dec 2 Mar for the Way 2 mile
May-23	15862					3	
Jun-23	17304						- Budget - Actual
	Acceptab	le Variance	±	15%			Target and Acceptable Variance

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/Level Pay Phase 1 implementation. Completed all development, testing and organizational readiness activities. Successfully implemented this new functionality in September 2022

- Successfully implemented new functionality that supports the Low Income Household Water Assistance Program (LIHWAP) in August 2022.
- Development and Testing activities are in progress to apply credits to customer accounts for their electric arrears. Funding was obtained from the California Arrearage Payment Program (CAPP) 2.0.
- Development and Testing activities are in progress for the Solid Resource Fee (SRF) debt relief fund for Low Income and Lifeline customers with SRF arrears. Funding will be obtained from the Los Angeles City Council.
- Began Requirements Gathering phase for the Merchant Services replacement and transition from Wells Fargo to JP Morgan Chase/Payments.

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

Labor costs are lower due to delays in hiring activity to fill vacant positions. Lower labor costs are also related to the delays with the kickoff/implementation of some capital project initiatives (such as Water Trouble Work Management system replacement and AMI).

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

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

Hiring activity to fill vacant positions is ongoing.

Budget and expenditures are currently being monitored and re-estimated based on the outstanding work and other future projects for the second half of the FY.

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

RESPONSIBLE MANAGER: Mark S. Northrup / Analee Klee

REPORTING PERIOD: October 2022

DEFINITION OF RATES METRIC: Number of Full Time Equivalents (FTEs) for ITS employed as compared to plan TARGET & ACCEPTABLE VARIANCE (FY 22/23): Vacant budgeted ITS positions at 50 vacancies or less by the end of the fiscal year (+/- 15%)

STATUS:	Outside /	Acceptable Va	ariance			
FYTD	Planned	Actual	Varia	Variance		ITS Staffing Program
as of:	Vacancies	Vacancies	Vacancies	%	(If Applicable)	FY 22/23
Jul-21	105	119	14	13.3%		
Aug-21	100	117	17	17.0%		120
Sep-21	95	115	20	21.1%		100
Oct-21	90	109	19	21.1%		5 80
Nov-21	85					± 60 +13%
Dec-21	80					
Jan-22	75					-15%
Feb-22	70					20
Mar-22	65					0
Apr-22	60					JULA BUST SEPTO OCT NOW DECT SAN RED AS AN AND JULA
May-22	55					
Jun-22	50					Planned Vacancies Actual Vacancies
	Acce	otable Variance	±	15%		Target and Acceptable Variance

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

1. BACKGROUND / PURPOSE

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

2. ACHIEVEMENTS / MILESTONES MET

As of October 31st, ITS has a net new employee count of 7 notwithstanding attrition associated with retirement, voluntary separation and terminations.

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

Hiring has been partially affected due to delays in the refresh of critical Civil Service lists ITS has exhausted. However, it is still projected that the target FTE count will be met by fiscal year end as additional candidate names become available.

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

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 faster.

Additionally, outreach to engage future IT graduates continues. ITS onboarded 10 exempt Student Professional Workers this fiscal year.

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

RESPONSIBLE MANAGER: LADWP Senior Management

REPORTING PERIOD: October 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 22/23):** +/- 15%

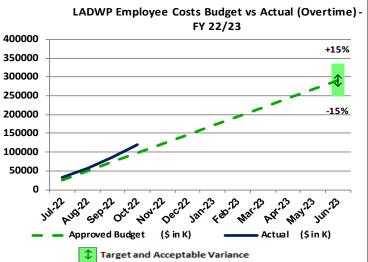
SOURCE OF DATA: ORACLE (HPBUDGET) - Rates Metrics Report

REGU	AR LABOR S	STATUS:	Outside	Accepta	ble Variance	
FYTD	Approved Budget	Actual	Varia	ance	Re-Estimate	LADWP Employee Costs Budget vs Actual (Regular Labor) - FY 22/23
as of:	(\$ in K)	(\$ in K)	\$ in K	%	(If Applicable)	2000000
Jul-22	128,796	120,012	-8,784	-6.8%		+15%
Aug-22	257,591	218,668	-38,923	-15.1%		1600000
Sep-22	386,387	324,381	-62,006	-16.0%		я ¹⁴⁰⁰⁰⁰⁰
Oct-22	515,182	428,502	-86,680	-16.8%		<u>21200000</u> <u>-15%</u>
Nov-22	643,978					월1000000 <u> </u>
Dec-22	772,773					<u>c</u> 800000
Jan-23	901,569					400000
Feb-23	1,030,364					200000
Mar-23	1,159,160					
Apr-23	1,287,955					SHAR AND READ ON NOW DECK SAME AD RANGE AD AND SUMP
May-23	1,416,751					
Jun-23	1,545,546					- Approved Budget (\$ in K) - Actual (\$ in K)
	Acceptabl	le Variance	±	15%		Target and Acceptable Variance

OVERTIME STATUS:

Outside Acceptable Variance

FYTD	Approved Budget	Actual	Variance		Re-Estimate	
as of:	(\$ in K)	(\$ in K)	\$ in K	%	(If Applicable)	
Jul-22	24,291	32,385	8,094	33.3%		
Aug-22	48,581	56,946	8,365	17.2%		
Sep-22	72,872	86,787	13,915	19.1%		nds
Oct-22	97,162	118,644	21,482	22.1%		\$ in thousands
Nov-22	121,453					u tř
Dec-22	145,744					\$.
Jan-23	170,034					
Feb-23	194,325					
Mar-23	218,615					
Apr-23	242,906					
May-23	267,196					
Jun-23	291,487					
	Acceptab	le Variance	±	15%		



		YTD as of October 20	YTD as of October 2022				
Employee Cost Category	Budget (\$ in K)	Actual (\$ in K)	Var (\$ in K)	Variance %	FY 22/23 Approved		
Regular Labor	515,182	428,502	-86,680	-16.8%	1,545,546		
Overtime	97,162	118,644	21,482	22.1%	291,487		
Regular Labor + Overtime	612,344	547,146	-65,198	-10.6%	1,837,033		
Health Care Allocation	122,946	114,404	-8,542	-6.9%	368,839		
Retirement & Death Benefit	72,939	110,715	37,776	51.8%	218,817		
Total	808,230	772,265	-35,965	-4.4%	2,424,689		

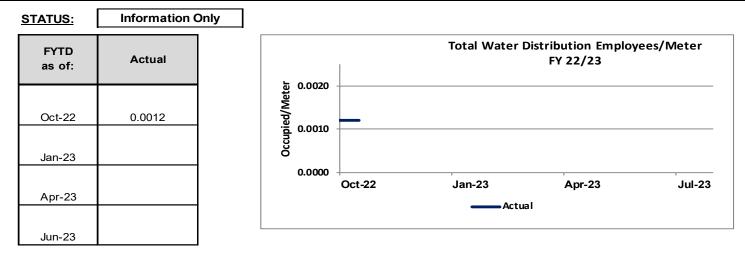
LADWP RATES METRIC – *Total Number of Water Distribution Employees* per Water Customer Meter (Water)

RESPONSIBLE MANAGER: Corporate Performance

REPORTING PERIOD: October 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 22/23): No Target



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

Total Number of Water Distribution Employees (excluding daily exempt and utility pre-craft trainees) as of October 2022 = 886

	10/22	01/23	04/23	06/23
Water	886			

Total Number of Water Meters as of October 2022 = 713.574

	10/22	01/23	04/23	06/23
Water	713,574			

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

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

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

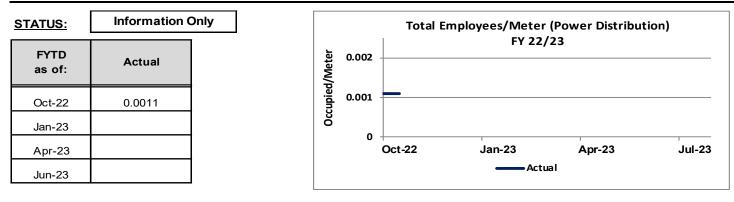
RESPONSIBLE MANAGER: Corporate Performance

REPORTING PERIOD: October 2022

54

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 22/23): No Target



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.

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-intime 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.

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

Total Number of Power Distribution Employees (excluding daily exempt and utility pre-craft trainees) as of October 2022 = 1,732

	10/22	01/23	04/23	06/23
Power	1,732			

Total Number of Power Meters as of October 2022 = 1,619,026

	10/22	01/23	04/23	06/23
Power	1,619,026			

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

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

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

RESPONSIBLE MANAGER: Corporate Performance

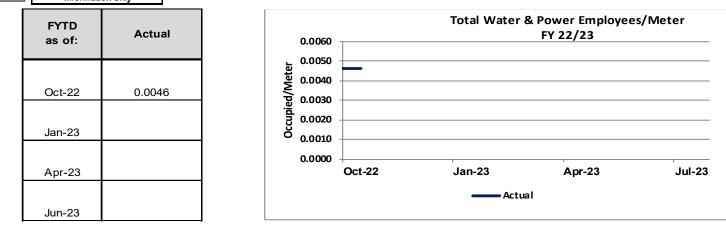
REPORTING PERIOD: October 2022

55

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 22/23): No Target

STATUS: Information Only



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

1. BACKGROUND / PURPOSE

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

2. ACHIEVEMENTS / MILESTONES MET

Data for the 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-intime 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. <u>PERFORMANCE / VARIANCE ANALYSIS</u> <u>& YEAR END PROJECTION</u>

Total Number of Water and Power Employees (excluding daily exempt and utility pre-craft trainees) as of October 2022 = 10,825

	10/22	01/23	04/23	06/23
Power	4,822			
Water	2,188			
Joint	3,815			
Total	10,825			

Total Number of Water and Power Meters as of October 2022 = 2,332,600

	10/22	01/23	04/23	06/23
Power	1,619,026			
Water	713,574			
Total	2,332,600			

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

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

Exceeds Target

Approved by Rubin 09:57:57 -08'00' LADWP RATES METRIC – *GHG Emissions Reduction Ratio (Joint)*

RESPONSIBLE MANAGER: Katherine Rubin

Katherine

Digitally signed by

Katherine Rubin

Date: 2022.12.12

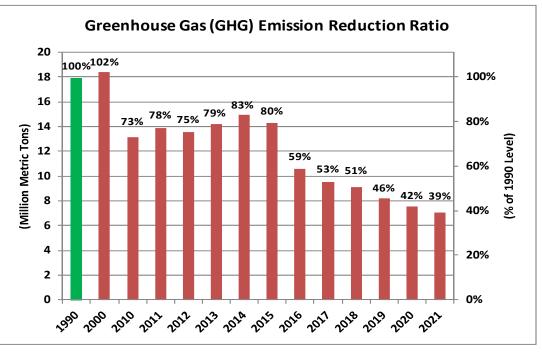
REPORTING PERIOD: As of October 2022

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 Tre	nd:
СҮ	CO2 Emissions (Metric Tons)	% of 1990 CO2 Emissions
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%
2021	7,046,462	39%



SOURCE: 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. POLICY / PURPOSE

- The State of California has set goals to reduce GHG emissions to 1990 levels by 2020, 40% below 1990 by 2030, and 85% below 1990 by 2045. 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 ٠ 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.
- California Assembly Bill 1279 (Muratsuchi, 2022) establishes state policy to achieve net zero GHG emissions no later than 2045 and reduce anthropogenic GHG emissions to at least 85% 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 2021 included 35.2% renewable energy based on LADWP's Power Content Label.
- LADWP's 2021 CO2 emissions are 61% below its 1990 emissions baseline.

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)

REPORTING PERIOD: October 2022

RESPONSIBLE MANAGER: David Jacot

DEFINITION OF RATES METRIC: Energy Savings Agains Plan TARGET & ACCEPTABLE VARIANCE (FY 22/23): GWh Installed Compared to the 2020 baseline/GWh for all customers. 15%

STATUS: Outside Acceptable Variance

FYTD	Energy Savings	Actual	Varia	nce	Re-Estimate	
as of:	Goals (GWh)	Fieldar	Unit or \$	%	(If Applicable)	
Jul-22	34.8	26.0	-9	-25.3%		
Aug-22	69.6	55.5	-14	-20.3%		
Sep-22	104.4	80.6	-24	-22.8%		
Oct-22	139.3	111.6	-28	-19.9%		
Nov-22	174.1					
Dec-22	209.0					
Jan-23	243.7					
Feb-23	278.5					
Mar-23	313.3					
Apr-23	348.2					
May-23	383.0					
Jun-23	417.8					
	Accepta	able Variance	±	15%		

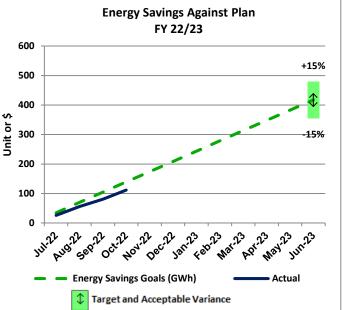


1. BACKGROUND / PURPOSE

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 338 GWh energy savings in FY 21-22, or 15% below the target despite COVID-19. Major contributors to the FY 21-22 total energy savings are the Commercial Lighting Incentive Program, Commercial Direct



Install, Custom Performance Program, Consumer Rebate Program, HVAC Optimization and LAUSD Direct Install energy efficiency programs.

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

Energy efficiency program activities will increase in FY 22-23 with Home Energy Improvement Program (HEIP) having resumed field assessments and installation work in mid-September 2022; and the Comprehensive Affordable Multi-Family Retrofits (CAMR) Program officially launched on May 1, 2022.

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

Exceeds Target

Utility Services Specialist positions have been filled and support for all energy efficiency programs are in place to accelerate programs.

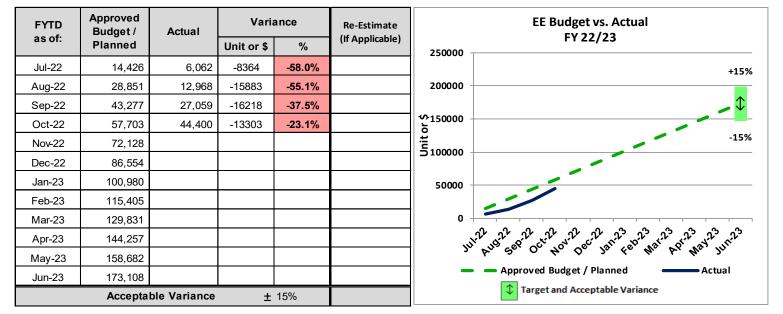
LADWP RATES METRIC - BUDGET VARIANCE ENERGY EFFICIENCY (JOINT)

RESPONSIBLE MANAGER: David Jacot

REPORTING PERIOD: October 2022

DEFINITION OF RATES METRIC: Budget vs. Actual for the overall Energy Efficiency Portfolio TARGET & ACCEPTABLE VARIANCE (FY 22/23): +/- 15%

STATUS: Outside Acceptable Variance



SOURCE OF DATA: Efficiency Solutions KPI FY 22-23 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 some programs resumed in June 2021. The Home Energy Improvement Program (HEIP) resumed field assessments and installation work mid-September 2022; and the Comprehensive Affordable Multi-Family Retrofits (CAMR) Program officially launched on May 1, 2022. Programs that continue to move forward are the Consumer Rebate Program, Commercial Lighting Incentive Program, and LAUSD Direct Install energy efficiency programs.

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

Energy efficiency program activities and expenditures are expected to increase in FY 22-23.

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

Energy Efficiency programs/activities will continue to ramp up and expenditures will continue to increase this FY 22-23. Utility Services Specialist positions have been filled and support for all energy efficiency programs are in place to accelerate programs.

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

RESPONSIBLE MANAGER: David Jacot

REPORTING PERIOD: October 2022

DEFINITION OF RATES METRIC: Cost per kWh over lifetime of installed energy efficiency solutions or measures. **TARGET & ACCEPTABLE VARIANCE (FY 22/23):** Annual metric: Levelized Cost \$ 0.15 per kWh +/- 10%

STATUS Within Acceptable Variance

SOURCE OF DATA: ESP Portfolios Report FY 21/22

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 21-22) 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 21-22 was \$0.37/kWh saved. Resource Programs that are targeted for cost effective measures for deferring infrastructure upgrades are currently at \$.07/kWh or 63% of total funding. The equity offerings, driven by policy and satisfying external stakeholders, are at \$0.79/kWh, weighted at 27% of total funding.

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

LADWP's Resource/Cost Effective Programs are below the \$0.15 per kWh target. However, the energy efficiency programs geared to meet equity metrics are at \$0.79/kWh, rendering the entire energy efficiency portfolio at a levelized cost of \$0.37/kWh, over the \$0.15 per kWh target.

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

Customer site-based Energy Efficiency programs/activities have resumed with safety protocols in place. Energy efficiency programs will continue to be offered to meet energy efficiency goals, including equity goals. ATTACHMENT II LADWP Rates Metrics Summary 2021-2022 Fiscal Year To Date (June 2022)

LADWP RATES METRICS SUMMARY

Related Rate Adjustment Factor	Category	#	Board Metric	Definition	FY 21/22 Target	Acceptable Variance	Responsible Manager	June 2022 Performance
	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	-21.6%
Reliability Cost	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	54.7%
Adjustment Factor	Power System Training Plan	3	Number of trainee graduates against Power System Training Plan	Number of Electric Distribution Mechanic Technician (EDMT) trainees that graduate from each respective training program against the annual training plan	EDMT: 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	40.0%
	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 canlendar year's goal toward state law mandates	Steven Pruett	6.2%
	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	-3.7%
Energy Cost Adjustment Factor	Renewable Portfolio Standard (Owned)		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	-2.1%
	Renewable Portfolio Standard (Owned)		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	-2.5%
	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)		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%

Related Rate Adjustment Factor	Category	#	Board Metric	Definition	FY 21/22 Target	Acceptable Variance	Responsible Manager	June 2022 Performance
	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	-18.8%
	Power System Reliability –	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	51.4%
	Program (Transmission)	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	-1.0%
	Power System Reliability	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	-21.7%
	Program (Substation)	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	-3.9%
		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	-3.1%
	Power System Reliability Program (Distribution)	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	-2.3%
Reliability Cost Adjustment Factor		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	12.7%
	Power System Reliability	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	8.5%
	Program (Distribution)	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	0.8%
		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	3.8%
		24	Average unit price for critical Distribution assets (Transformers)	Average unit price per transformer	Transformer: \$9.1k	+/- 15%	David Hanson	-6.6%
	Power System Reliability	25	Average unit price for critical Distribution assets (Poles)	Average unit price per pole	Pole: \$33.9k	+/- 15%	David Hanson	5.6%
	Program (Distribution)	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	12.0%
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	-33.2%

Related Rate				- 6	FY 21/22			June 2022
Adjustment Factor	Category	#	Board Metric	Definition	Target	Acceptable Variance	Responsible Manager	Performance
None	Distribution Automation Project progress		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		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	211.6%
	Water Supply	31	Water supply costs budget vs. actual (\$M) for capital	Board Approved Annual Budget vs. Actual expenditures	FY21/22 Board Approved Budget - May 2021	+/- 10%	April Thang	-54.4%
	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	10.1%
	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
Mater Guralia Cast	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 Cost Adjustment Factor	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	-0.5%
	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	-35.2%
	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	14.5%
	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	6.6%
	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	9.4%
Water	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	0.8%
Infrastructure Adjustment Factor	Capital Improvement Program	41	Assets replaced against plan	Feet of trunkline replaced against plan	Trunkline: 10,700 Feet	+/- 10%	Trunkline: Jianping Hu	-9.8%
	Capital Improvement Program	42	Assets replaced against plan	Number of meters replaced against plan	Meters: 32,500	+/- 10%	Mainline & Meters: Breonia Lindsey/Sandra Foster	5.7%

Related Rate Adjustment Factor	Category	#	Board Metric	Definition	FY 21/22 Target	Acceptable Variance	Responsible Manager	June 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	15.4%
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	0.8%
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	-17.2%
	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	-48.3%
	Financial and Human Resources Replacement Project		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	-1.2%
	Customer Information System Upgrades		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	-39.9%
	Information Technology Services Staffing Program		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	-4.0%
	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	-8.7%
	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		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		Corporate Performance	NA

Related Rate Adjustment Factor	Category	#	Board Metric	Definition	FY 21/22 Target	Acceptable Variance	Responsible Manager	June 2022 Performance
	Renewable Portfolio Standard (Owned)	56	Green House Gas (GHG) emissions reduction ratio		Calendar Year 2021: 57% below LADWP's 1990 levels Calendar Year 2022: 60% below LADWP's 1990 levels		Mark Sedlacek/ Katherine Rubin	39.0%
	Energy Efficiency	57	Energy Efficiency (EE) ratio (%)	GWh installed compared to the 2020 baseline/GWh for all customers	1.50%	+/- 15%	David Jacot	-15.3%
Energy Cost Adjustment Factor	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	-20.3%
	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	

Power System

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

RESPONSIBLE MANAGER: Brian Williams, Power System Training

REPORTING PERIOD: June 2022

1 Illa

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

Re-Estimate	ance	Varia	Actual	Planned	FYTD	
Ne-Listinate	%	\$	(\$/trainee)	(\$/trainee)	as of:	
	-36.6%	(256.2)	444.3	700.5	Jul-21	
	-4.9%	(34.6)	665.9	700.5	Aug-21	
	-13.7%	(96.1)	604.4	700.5	Sep-21	
	-33.5%	(234.7)	465.8	700.5	Oct-21	
	-37.8%	(265.0)	435.5	700.5	Nov-21	
	-36.0%	(252.3)	448.2	700.5	Dec-21	
	-36.6%	(256.4)	444.1	700.5	Jan-22	
	13.9%	97.1	797.6	700.5	Feb-22	
	-13.3%	(92.9)	607.6	700.5	Mar-22	
	-5.6%	(39.1)	661.4	700.5	Apr-22	
	-50.6%	(354.5)	346.0	700.5	May-22	
	-7.4%	(52.1)	648.4	700.5	Jun-22	
	-21.6%	(151.3)	549.2	700.5	Ann Avg	

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% 0
 - 2018 to 2019; 60% 0
 - 2020 to 2021: 63% 0

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 May due to increased spending in the Classroom Trainers for EDM Trainees (X7999) and Classroom Training for EDM Trainees (X7922) job. The main driver for

the higher CPT is the increased Allocations and Directs for X7922 as well as for X7999.

- Annualized Job totals for (X7922/X7999/X7955) vary depending on the tools and materials purchased for subsequent new classes.
- The Annual Average Actual (\$/trainee) of \$549.2K was calculated using the final figures of the related Jobs (X7922/X7999/X7955) for the entire fiscal year 21/22 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.

Within Acceptable Variance



Needs Attention

1



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

RESPONSIBLE MANAGER: Brian Williams, Power System Training

REPORTING PERIOD: June 2022

inin

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	Planned	Actual	Var	iance	Re-Estimate
as of:	(\$/trainee)	(\$/trainee)	\$	%	Ne-LStinate
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%	
eb-22	553.1	924.5	371.4	67.1%	
/lar-22	553.1	821.1	268.0	48.5%	
Apr-22	553.1	919.3	366.2	66.2%	
lay-22	553.1	764.8	211.7	38.3%	
lun-22	553.1	1,095.2	542.1	98.0%	
nn Avg	553.1	855.9	302.8	54.7%	

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

1. BACKGROUND / PURPOSE

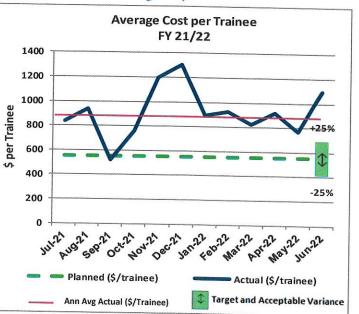
To effectively calculate a monthly cost per trainee (CPT) for an Electrical Mechanic (EM) completing a 48-month on-the-job and classroom training program. The EM Training Program has changed from a 40-month program to a 48-month program.

2. ACHIEVEMENTS / MILESTONES MET

- The past classes average success rates are based on two calendar years as follows:
 - 2014 to 2015: 70% 0
 - 2016 to 2017: 85% 0
 - 2018 to 2019: 89% 0
 - 2020 to 2021: 75% 0

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 May 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 and Directs for X7923 as well as increased Allocations for X7926

- Annualized Job totals for (X7923/X7926/X7955) vary depending on the tools and materials purchased for subsequent new classes.
- 4. The Annual Average Actual (\$/trainee) of \$855.9K was calculated using the final figures of the related Jobs (X7923/X7926/X7955) for the entire fiscal year 21/22 with the 12-month average trainee occupancy.

5. 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.

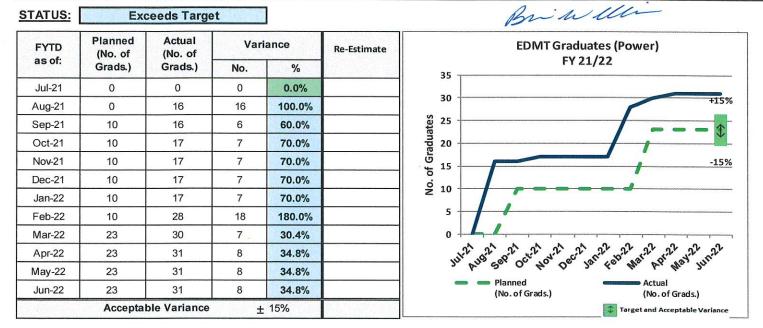
Needs Attention

LADWP RATES METRIC - EDMT Graduates (Power)

RESPONSIBLE MANAGER: Brian Williams, Power System Training

REPORTING PERIOD: June 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%



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 21/22, a total of 31 EDMs graduated from EDMT Classes 60 & 61 (82% success rate).
- The past classes average success rates are based on two calendar years as follows:
 - o 2014 to 2015: 56%
 - o 2016 to 2017: 59%
 - o 2018 to 2019: 60%
 - o 2020 to 2021: 63%

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

- Due to the modified screening process, there has been an increase in the quality of candidates who have entered the Training Program, yielding a higher graduation rate.
- There are currently seven active trainee classes in the Training Program. Class 62 is expected to graduate 13 trainees in September of 2022.

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

 The screening process is continually being reviewed in an effort to increase the quality of candidates and to reduce the dropout rate. Overhead and underground disciplines are no longer separated and all future trainees are cross-trained in both. EDMT candidates are now required to complete two performance tests during the initial certification interviews.

Exceeds Target

LADWP RATES METRIC - EMT Graduates (Power)

RESPONSIBLE MANAGER: Brian Williams, Power System Training

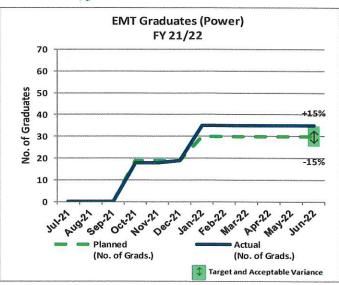
REPORTING PERIOD: June 2022

-Will

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

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

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	5	16.7%	
Jun-22	30	35	5	16.7%	



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 21/22, a total of 35 EMTs graduated from EMT Classes 21C, 21D and 22A (71% success rate).
- The past classes average success rates are based on two calendar years as follows:
 - 1. 2014 to 2015: 70%
 - 2. 2016 to 2017: 85%
 - 3. 2018 to 2019: 89%
 - 4. 2020 to 2021: 75%

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

- Hiring deficiencies from 2010 through 2013 have resulted in minimal numbers of graduates in recent years.
- 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 (89% graduation rate).

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

 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)

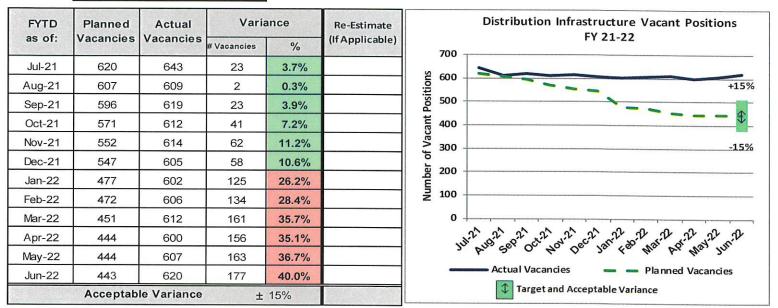
RESPONSIBLE MANAGER: Brian Wilbur

REPORTING PERIOD: June 2022

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

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

STATUS: Outside Acceptable Variance



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 June, there was a total of 620 vacancies, which was 177 or 40% over planned vacancies.

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

- 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), Electrical Craft Helper (ECH), and Line Maintenance Assistant (LMA) positions.
 - Of the 37 interviews scheduled in March and April, only a fraction of the

Exceeds Target



planned ECH-B positions was filled; 10 candidates declined to interview, 24 candidates were made offers, and only 17 candidates proceeded with the job offers. Additional recruitment efforts need to occur once more in the next few months.

 There is no eligible list for LMA and the exam is scheduled July 2022.

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

- PSO has filled their ECH vacancies and new employees will start on August 15, 2022.
- PTD and PCM will continue to fill all vacant Power Distribution Infrastructure Field positions.



LADWP RATES METRIC – *Total Renewable Portfolio Standard (Power)*

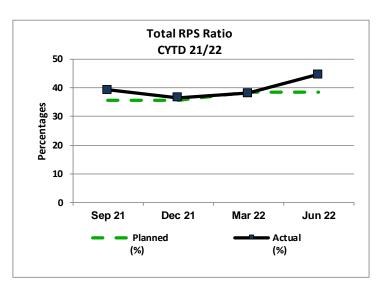
RESPONSIBLE MANAGER: Steven Pruett, Power External Energy Resources SPT REPORTIN

REPORTING PERIOD: June 2022

6

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 = ± 3%

STATUS:	Exc	t		
CYTD	Planned	Actual	Variance	Re-Estimate
as of:	(%)	(%)	%	(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	44.7	6.2%	
Accepta	ble Variance			



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

• Actuals for the first quarter of FY 22/23 will be available in November 2022.

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

- Uncertainty in performance of renewable resources, evolving accounting methods, changing regulations, and transmission disruptions are risk factors that can impact the performance of this metric.
- To meet the RPS goals and avoid the risk of non-compliance with the CEC's RPS requirement, LADWP uses targets (forecasts) above the CEC's RPS ratio requirement. This will provide a hedge against the abovementioned risk factors.
- Excess Renewable Energy Credits (RECs) from one compliance period can be rolled over into the next compliance period.

Date: 2022.07.26 08:25:46 -07'00 RATES METRIC – Total RPS Cost vs. Plan, By Wind (Power)

REPORTING PERIOD: June 2022

RESPONSIBLE MANAGER: Marlon Santa Cruz, PEER External Energy Resources DEFINITION OF RATES METRIC: Total RPS Purchased Power Cost (\$/MWH), Per Power Purchase Agreements (PPA), As Compared To Plan, By Wind

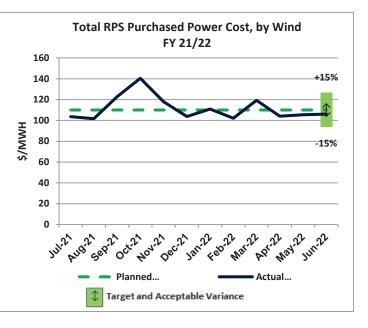
TARGET & ACCEPTABLE VARIANCE (FY 21/22): Target = \$110.08/MWH; Acceptable Variance = ± 15%

STATUS: Within Acceptable Variance

FYTD	Planned	Actual	Variance		Re-Estimate
as of:	(\$/MWH)	(\$/MWH)	\$	%	
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	105.46	-4.62	-4.2%	
Jun-22	110.08	106.06	-4.02	-3.7%	
	Accepta	able Variance	±	15%	

Digitally signed by Marlon

Santa Cruz



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

1. BACKGROUND / PURPOSE

- PPA = Power Purchase Agreement. The energy cost is calculated at plant's "busbar", in dollars per mega-watt-hour (\$/MWH), per executed PPA.
- The aggregated energy costs are the weighted average of seven wind PPAs for which the \$/MWH cost is determined by the seven individual PPAs, but the energy outputs are a function of the individual project's capacity and wind resource availability, which is variable.
- Wind energy supports meeting Renewable Portfolio Standard (RPS) goals. Wind energy is currently estimated to represent 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.

Date: 2022.07.20 10:41:11 -07'00'

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Santa Cruz

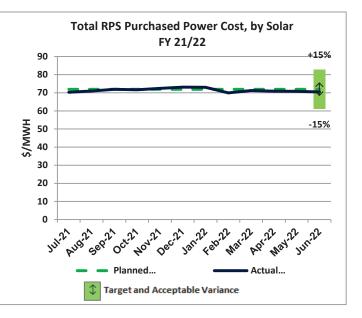
LADWP RATES METRIC – *Total RPS Cost vs. Plan, By Solar (Power)*

RESPONSIBLE MANAGER: Marlon Santa Cruz, PEER External Energy Resources **REPORTING PERIOD:** June 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	Planned	Actual	Variance		Re-Estimate
as of:	(\$/MWH)	(\$/MWH)	\$	%	
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	70.83	-1.1	-1.5%	
Jun-22	71.93	70.43	-1.5	-2.1%	
	Accepta	able Variance	±	15%	



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

1. BACKGROUND / PURPOSE

- PPA = Power Purchase Agreement. The energy cost is calculated at plant's "busbar", in dollars per mega-watt-hour (\$/MWH), per executed PPA.
- The aggregated energy costs are the weighted average of the solar PPAs for which the \$/MWH cost is fixed by individual PPAs 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. <u>PERFORMANCE / VARIANCE ANALYSIS</u> <u>& YEAR END PROJECTION</u>
 - Actual is within acceptable variance.
- 4. <u>MITIGATION PLAN AND / OR</u> <u>RECOMMENDATIONS</u>
 - No recommendations at this time.

Digitally signed by Marlon Santa Cruz Date: 2022.07.20 10:41:35

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

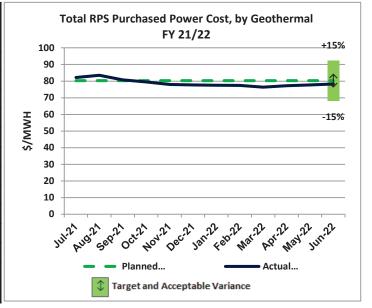
 RESPONSIBLE MANAGER: Marlon Santa Cruz, PEER External Energy Resources
 REPORTING PERIOD: June 2022

 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	Planned			Re-Estimate			
as of:	(\$/MWH)	(\$/MWH)	\$	%			
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	77.76	-2.52	-3.1%			
Jun-22	80.28	78.29	-1.99	-2.5%			
	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 "busbar", in dollars per mega-watt-hour (\$/MWH), per executed PPA.
- The aggregated energy costs are the weighted average of six geothermal PPAs for which the \$/MWH cost is fixed for firm and imbalance energy. However, the energy outputs are a function of the individual project's capacity and geothermal resource availability, which is variable.
- Geothermal energy supports meeting Renewable Portfolio Standard (RPS) goals. Geothermal energy currently represents 27% of the Calendar Year 2021 RPS portfolio.

2. ACHIEVEMENTS / MILESTONES MET

No updates.

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

• Actual is within acceptable variance.

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

• No recommendations at this time.

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

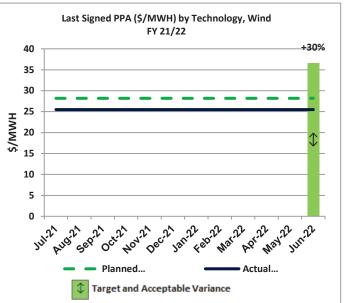
 RESPONSIBLE MANAGER: Marlon Santa Cruz, PEER External Energy Resources
 REPORTING PERIOD: June 2022

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

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Date: 2022.07.28



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

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

• No recommendations at this time.

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

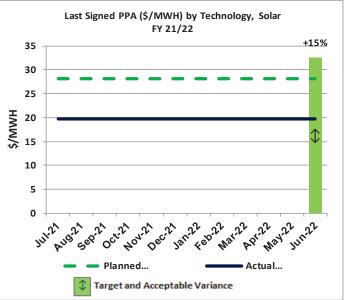
 RESPONSIBLE MANAGER: Marlon Santa Cruz, PEER External Energy Resources
 REPORTING PERIOD: June 2022

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

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

STATUS: Within Acceptable Variance Variance FYTD Planned Actual Re-Estimate (\$/MWH) (\$/MWH) as of: \$ % 35 Jul-21 28.20 19.67 -8.53 -30.2% 30 28.20 -8.53 Aug-21 19.67 -30.2% 25 Sep-21 28.20 19.67 -8.53 -30.2% \$/MWH 19.67 Oct-21 28.20 -8.53 -30.2% 20 Nov-21 28.20 19.67 -8.53 -30.2% 15 28.20 -8.53 Dec-21 19.67 -30.2% 10 Jan-22 28.20 19.67 -8.53 -30.2% 5 Feb-22 28.20 19.67 -8.53 -30.2% Mar-22 28.20 19.67 -8.53 -30.2% 0 Apr-22 28.20 19.67 -8.53 -30.2% 28.20 -8.53 -30.2% May-22 19.67 Jun-22 28 20 19.67 -8.53 -30.2% Acceptable Variance + 15%

Digitally signed by Marlon Santa Cruz Date: 2022.07.28



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-watthour (\$/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. <u>PERFORMANCE / VARIANCE ANALYSIS</u> <u>& YEAR END PROJECTION</u>

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

• No recommendations at this time.

Digitally signed by Marlon Santa Cruz Date: 2022.07.20 10:42:46

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

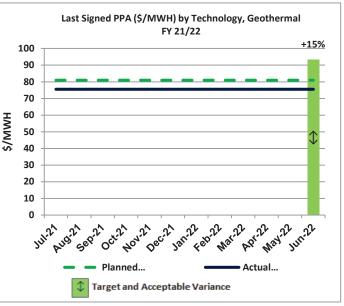
 RESPONSIBLE MANAGER: Marlon Santa Cruz, PEER External Energy Resources
 REPORTING PERIOD: June 2022

 DEFINITION OF RATES METRIC: Last Signed PPA (\$/MWH) by Technology, Geothermal
 Image: Comparison of the compa

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

STATUS: Within Acceptable Variance

FYTD	Planned	Actual	Variance		Re-Estimate
as of:	(\$/MWH)	(\$/MWH)	\$	%	
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	75.50	-5.50	-6.8%	
Jun-22	81.00	75.50	-5.50	-6.8%	
	Accepta	able 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 "busbar", 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. <u>PERFORMANCE / VARIANCE ANALYSIS</u> <u>& YEAR END PROJECTION</u>

• Actual is within acceptable variance.

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

• No recommendations at this time.

LADWP RATES METRIC – *Power System Reliability Program Generation, Capital (Power)*

Robert M. Fick Digitally signed by Robert M. Fick Date: 2022.08.17 14:37:48 -07'00'

RESPONSIBLE MANAGER: Robert Fick, Power Supply Operations

REPORTING PERIOD: June 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	Approved Budget	Actual	Varia	ance	Re-Estimate		PSRP Generation, Capital
as of:	(\$ in K)	(S in K)	\$ in K	%	(If Applicable)	30000 -	FY 21/22
Jul-21	1,925.0	1,020.0	-905.0	-47.0%			+15%
Aug-21	3,850.5	2,061.0	-1,789.5	-46.5%		25000 -	
Sep-21	5,776.1	3,244.0	-2,532.1	-43.8%		20000 -	
Oct-21	7,701.6	4,303.0	-3,398.6	-44.1%		×	-15%
Nov-21	9,627.2	5,408.0	-4,219.2	-43.8%		.드 15000 - ඉ	
Dec-21	11,552.7	7,019.0	-4,533.7	-39.2%		10000 -	
Jan-22	13,478.3	8,473.0	-5,005.3	-37.1%		5000 -	
Feb-22	15,403.8	11,486.0	-3,917.8	-25.4%		5000	i
Mar-22	17,329.4	13,064.0	-4,265.4	-24.6%		o +	
Apr-22	19,254.9	14,433.0	-4,821.9	-25.0%		Jul	AUST GEORD OCT NOW DECT JAN 22 HAT AST AND JUNIC
May-22	21,180.5	16,359.0	-4,821.5	-22.8%		S*	
Jun-22	23,106.0	18,763.0	-4,343.0	-18.8%			Actual
	Acceptal	ble Variance	±	15%			Target and Acceptable Variance

SOURCE OF DATA: FI 21186 (KPI # 01.03.01.08)

1. BACKGROUND / PURPOSE

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

2. ACHIEVEMENTS / MILESTONES MET

- In July 2021, 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, 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

Exceeds Target

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 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 2022, 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.
- In May, CPP reached a milestone of completing the cleaning of the Rotor and

Stator on Unit 1 with dry ice blasting as part of the work to repair the Stator during the current forced outage. This allows repairs to the back iron on the Stator to proceed. Completing this work is important for the long-term reliable operation of the hydroelectric generator. In addition, CPP crews completed preventive maintenance and repairs to Unit 4 during the scheduled inspection and repair outage.

• In June, CPP Spring maintenance outages continued with completion of Unit 4 and Unit 7, where preventive, corrective, and condition-based maintenance is performed on the hydro-electric generating units. This work is important to ensure the units provide efficient and reliable power generation and pumped storage services to support Power System needs and to serve the rate payers.

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

- 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 was completed in July 2022.
- 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	\$203.0M
Project Actuals to Date	\$116.9M

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

 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:** June 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: Outside Acceptable Variance

PSRP Transmission, Capital FY 21/22		Re-Estimate	ance	Varia	Actual	Approved Budget	FYTD
F1 21/22	100000 -		%	\$ in K	(\$ in K)	(\$ in K)	as of:
	90000 -		-84.0%	(4,340.0)	827.0	5,167.0	Jul-21
	80000 -		-40.0%	(4,136.8)	6,197.0	10,333.8	Aug-21
	70000 -		-48.9%	(7,578.7)	7,922.0	15,500.7	Sep-21
	ے ⁶⁰⁰⁰⁰ -		-49.9%	(10,312.6)	10,355.0	20,667.6	Oct-21
-+-	.⊑ 50000 - ∽		-51.7%	(13,364.5)	12,470.0	25,834.5	Nov-21
	40000 - 30000 -		-52.5%	(16,287.5)	14,714.0	31,001.5	Dec-21
	20000 -		-45.2%	(16,345.4)	19,823.0	36,168.4	Jan-22
	10000 -		-46.6%	(19,258.3)	22,077.0	41,335.3	Feb-22
	0 -		18.2%	8,482.8	54,985.0	46,502.2	Mar-22
his son oct hours been sand both that has how h	.3		8.2%	4,221.9	55,891.0	51,669.1	Apr-22
	3-		36.0%	20,435.0	77,271.0	56,836.0	May-22
Approved Budget Ac			51.4%	31,869.0	93,872.0	62,003.0	Jun-22
Target and Acceptable Variance			15%	±	le Variance	Acceptab	

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.

2. ACHIEVEMENTS / MILESTONES

- As of June, two more maintenance hole lid restraints were installed, in furtherance of this 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.

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

 Actual costs were above the approved budget by 51.4%. Scattergood-Olympic Cable B (Job C1406/O1406) scope has changed to construct Scattergood-Olympic Cable B, from the original scope of creating Scattergood-Pershing Cable B and Pershing-Olympic Cable B after Receiving Station X (Pershing) is ready to intercept this circuit.

- Overrun is caused by payments to prime contractor for meeting milestones per agreement and performing Change Order work for Job C1406/O1406. Job C1406 has been zeroed out due to budgetary practice and \$130.5M needs to be allocated to Job O1406 to complete the scope of work.
- The FI re-estimate above does not include C1406/O1406.

Total Project Approved from	
Inception to FY 29/30	\$1,777.1M
Projects Approved to Date	\$1,297.5M
Project Actuals to Date	\$1,138.5M

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

• Obtain a fresh FY estimate from the Job Manager for Job O1406.

-15%

Actual...

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

RESPONSIBLE MANAGER: Ruben Hauser, Power Transmission and Distribution

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

Approved	Actual	Varia	ince	Re-Estimate
Budget (\$ in K)	(\$ in K)	\$ in K	%	(If Applicable)
3,264.1	1,877	-1387.1	-42.5%	
5,296.9	5,911	614.1	11.6%	
7,070.3	10,013	2942.7	41.6%	
9,757.4	12,493	2735.6	28.0%	
11,579.9	16,434	4854.1	42%	
14,750.6	18,460	3709.4	25%	
17,344.5	20,783	3438.5	20%	
20,234.3	24,442	4207.7	21%	
23,525.8	27,661	4135.2	18%	
32,693.0	37,343	4650.0	14%	
35,903.0	34,917	-986.0	-3%	
39,169.0	38,857	-312.0	-1%	
	(\$ in K) 3,264.1 5,296.9 7,070.3 9,757.4 11,579.9 14,750.6 17,344.5 20,234.3 23,525.8 32,693.0 35,903.0 39,169.0	(\$ in K)3,264.11,8775,296.95,9117,070.310,0139,757.412,49311,579.916,43414,750.618,46017,344.520,78320,234.324,44223,525.827,66132,693.037,34335,903.034,917	(\$ in K)\$ in K3,264.11,877-1387.15,296.95,911614.17,070.310,0132942.79,757.412,4932735.611,579.916,4344854.114,750.618,4603709.417,344.520,7833438.520,234.324,4424207.723,525.827,6614135.232,693.037,3434650.035,903.034,917-986.039,169.038,857-312.0	(\$ in K)(\$ in K)\$ in K%3,264.11,877-1387.1-42.5%5,296.95,911614.111.6%7,070.310,0132942.741.6%9,757.412,4932735.628.0%11,579.916,4344854.142%14,750.618,4603709.425%17,344.520,7833438.520%20,234.324,4424207.721%23,525.827,6614135.218%32,693.034,917-986.0-3%39,169.038,857-312.0-1%

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

1. BACKGROUND / PURPOSE

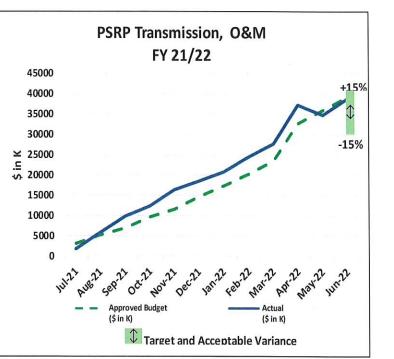
 To maintain facilities generally consisting of overhead and underground high voltage electric circuitry used to transport electricity in bulk quantities from generation facilities to distribution facilities over long distances for system reliability. Power Transmission and Distribution (PTD) operates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

2. ACHIEVEMENTS / MILESTONES MET

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

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

- The KPI is inside 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



REPORTING PERIOD: June 2022

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

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

 PTD management will monitor this FI and address any variations.



LADWP RATES METRIC – *PSRP Substation, Capital (Power)*

RESPONSIBLE MANAGER: Tesfaye Zeleke

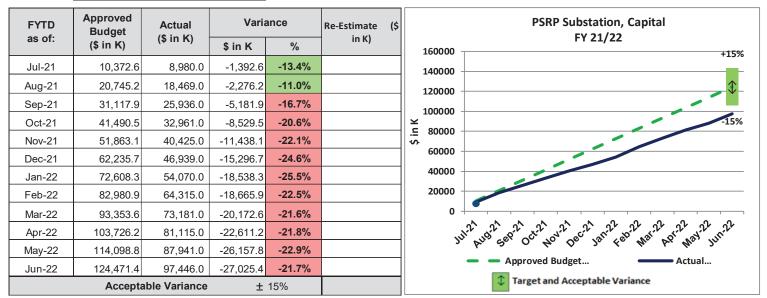
Test Power Engineering and Technical Services Division

Digitally signed by Tesfaye Zeleke Date: 2022.08.21 09:17:44 -07'00'

REPORTING PERIOD: June 2022

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



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

BACKGROUND / PURPOSE 1.

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)	4	2	2	
04.01.01.81	High Voltage Transformers (high side 100kV to 230kV - RS, SS)	2	2		
04.01.01.77	Medium Voltage Transformers (high side below 100kV – Distributing Station - DS)	16	21	21	
	CIRCUIT BREAKER REPLACEMENT:				
04.01.01.78	Transmission Circuit Breakers (>100kV - RS, SS, High Voltage Alternate Current Switchyards)	7	2	2	
04.01.01.79	Sub-transmission Circuit Breakers (34.5kV - RS, DS)	12	18	18	
04.01.01.80	Distribution Circuit Breakers (4.8kV - DS)	5	16	16	
	SUBSTATION AUTOMATED:				
04.01.03.01	Distributing or Receiving Station Upgrade/Automation	3	12	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)	7	20	20	
	BATTERY SYSTEMS:				
04.01.01.87	Substation Battery Systems (RS, DS)	3	6	6	
With	in Acceptable Variance Outside Acceptable Variance Exceeds Tars	vet 🛛	Needs At	tention	

Within Acceptable Variance

Outside Acceptable Variance

Exceeds Target

Needs Attention

Additional year-to-date achievements and milestones include:

• Substation Equipment Life Extensions: (6) DS transformer Cans, (123) 34.5 kV circuit breakers, and (52) 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 expenditures for the FY totaled at \$97.4M.
- 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 from 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	\$1,813.1M
Project Actuals to Date	\$1,510.1M

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

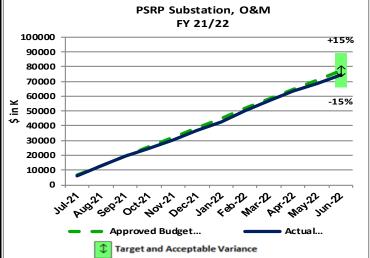
- Conduct coordination meetings with various supporting divisions to align resources from the planning, design, procurement, construction, and commissioning phases of projects.
- Perform long-term planning to identify future resource needs to support the Substation Power System Reliability Program.
- 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 BATES METRIC - PSRP Substation, O&M (Power) Imathan Fonti RESPONSIBLE MANAGER: Jongthan Fonti, Power Construction & Maintenance REPORTING PERIOD: June 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

	Re-Estimate	ance	Varia	Actual	Approved Budget	FYTD
		%	\$ in K	(\$ in K)	(\$ in K)	as of:
		-1.6%	-105.3	6,347	6,452	Jul-21
		2.4%	310.3	13,215	12,905	Aug-21
		-0.5%	-94.0	19,262	19,356	Sep-21
-		-5.1%	-1304.3	24,505	25,809	Oct-21
1.		-6.4%	-2063.7	30,198	32,262	Nov-21
		-5.5%	-2129.0	36,585	38,714	Dec-21
		-5.1%	-2299.3	42,867	45,166	Jan-22
		-3.2%	-1659.8	49,957	51,617	Feb-22
		-1.7%	-998.0	57,073	58,071	Mar-22
		-2.0%	-1267.0	63,254	64,521	Apr-22
		-3.3%	-2377.0	68,596	70,973	May-22
		-3.9%	-2987.0	74,441	77,428	Jun-22
1		15%	±	le Variance	Acceptab	



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, and retirements. Additionally, employee absences continue because of COVID-19. Therefore, there is insufficient staff to handle both ongoing Capital and O&M projects.

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

	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	21	53	462
Distributing Station (DS) Circuit Outages	94	98	98	117	71	108	82	78	105	82	89	64	1086
5-kV Circuit Grounds	59	35	35	51	26	107	90	44	30	32	31	51	591
NO. OF INSULATOR WASHINGS:													
Generating Stations	0	0	0	0	0	0	0	0	0	0	0	1	1
Receiving Stations	5	4	3	3	5	4	3	3	4	6	3	4	47
Distributing Stations	11	12	14	12	3	11	15	12	10	6	13	14	133

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

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

RESPONSIBLE MANAGER: Vincent Zabukovec Vinut Jahhan REPORTING PERIOD: June 2022

Power Engineering and Technical Services Division

PSRP Distribution, Capital

FY 21/22

Janizz Feb.22

Target and Acceptable Variance

Warill Aprill Waysy

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 Approved Variance FYTD Actual Budget Re-Estimate (\$ in K) as of: (\$ in K) \$ in K % 400000 Jul-21 28,145.4 25,728.0 -2,417.4 -8.6% 350000 49,178.0 56,290.8 -7,112.8 -12.6% Aug-21 300000 Sep-21 84,436.30 81,804.0 -2,632.3 -3.1% 250000 112,581.7 108,041.0 -4,540.7 -4.0% Oct-21 .5200000 132,995.0 -5.5% Nov-21 140,727.1 -7,732.1 150000 -14,633.5 168,872.5 154,239.0 -8.7% Dec-21 100000 197,017.9 183,198.0 -13,819.9 -7.0% Jan-22 50000 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% 281,454.2 264,294.0 -17,160.2 -6.1% Apr-22 May-22 309 599 6 289,096.0 -20,503.6 -6.6% -10,572.0 Jun-22 337.745.0 327,173.0 -3.1% ± 15% Acceptable Variance

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) 0
 - Poles: 37% (Job P6322) 0
 - Crossarms: 14% (Job P6318) \cap
 - Cables: 18% (Job P6306) 0

2. ACHIEVEMENTS / MILESTONES MET

- The Distribution Reliability spent 96.9% of the budget through the month of June to work on and complete the following:
 - New rack and bank installation RS-Rinaldi, 0 RS-B and RS-M
 - 1,183 transformer installations 0
 - 3,799 pole replacements 0
 - 11,087 deteriorated crossarm replacements 0
 - 51.9 circuit-mile of cable replacements 0
 - 11,124 FIX-IT tickets (Jobs P6318, P6322, 0 P6394, P6306, P6309 & O1357)
 - Work continued on Owens Valley -0 overhead/underground installations and removals, asbestos removals, trouble ticket repairs and service restorations due to outages.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

H04.21 Dec.21

Approved Budget...

octil

Variance through the month of June is \$10.6M, 3.1% 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.

Total Project Approved From	
Inception to FY29/30	\$6,622.0M
Projects Approved to Date	\$3,942.4M
Project Actuals to Date	\$3,482.0M

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

No mitigation plan at this point.

+15%

£

.15%

Junil

Actual...

CJB

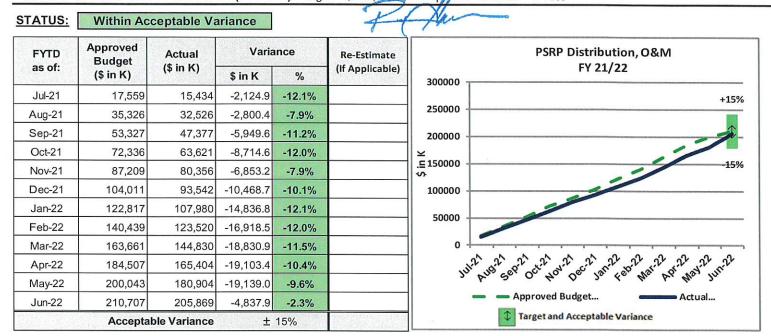


LADWP RATES METRIC - *PSRP Distribution, O&M (Power)*

 RESPONSIBLE MANAGER: Ruben Hauser, Power Transmission and Distribution
 REPORTING PERIOD: June 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%



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. <u>PERFORMANCE / VARIANCE ANALYSIS</u> & 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 (PTD) Vegetation Management Programs (Job P6341). Not all invoices were processed by fiscal year-end, but \$3M were processed which decreased the underrun and bring PTD closer to the approved budgeted amount. Approximately \$500K in

costs were not able to be processed by this fiscal year-end and will be paid in FY 22/23.

19

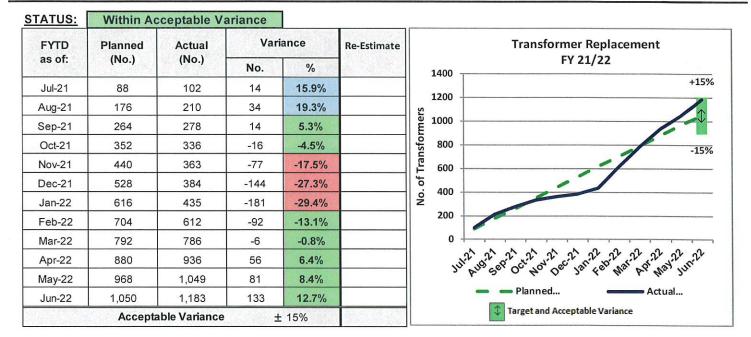
4. <u>MITIGATION PLAN AND / OR</u> <u>RECOMMENDATIONS</u>

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:** June 2022

DEFINITION OF RATES METRIC: Number of Transformers Replaced Against Plan **TARGET & ACCEPTABLE VARIANCE (FY 21/22):** Target = 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 1,050 transformers and the current actual number of transformers replaced is 1,183.

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

- 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 were utilized as needed during storms, focusing on restoration and clean up.
- PTD is constantly monitoring the transformer replacement activity and adjusting work and resources as needed. This increase should not last beyond a few months as our focus changes with the

RH

Outside Acceptable Variance

Exceeds Target

weather and operating needs. PTD's resources have been revamped to transformer replacement in January, which shows an increase starting in February.

 Transformers are replaced after failure; overload condition or regular scheduled maintenance is required. The transformers are counted after being replaced whether due to heat or scheduled work.

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

- PTD will continue to monitor transformer replacements. Division is constantly evaluating what needs to be replaced and continuing to replace transformers that have been targeted for replacement.
- Weather conditions change throughout the year, affecting the amount of activity in any given month.

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.

Exceeds Target

LADWP RATES/EQUITY METRIC - Pole Replacement (Power) **REPORTING PERIOD:** June 2022

RESPONSIBLE MANAGER: Ruben Hauser, Power Transmission and Distribution

EQUITY CORE CATEGORY: Water and Power Infrastructure Investment

DEFINITION OF RATES METRIC: Number of Poles Replaced Against Plan

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

Within Acceptable Variance Variance FYTD Planned **Pole Replacement** Actual **Re-Estimate** as of: (No.) (No.) FY 21/22 No. % 4500 Jul-21 292 365 73 25.0% 4000 Aug-21 583 565 -18 -3.1% 3500 876 Sep-21 1,075 199 22.7% 3000 of Poles Oct-21 1,168 1,288 120 10.3% 2500 1,549 Nov-21 1,485 -64 -4.1% 2000 No. Dec-21 1,752 1,809 57 3.3% 1500 -14 Jan-22 2,043 2.029 -0.7% 1000 Feb-22 2,335 2,370 35 1.5% 500 ٥ Mar-22 2,628 2,818 190 7.2% 404.21 Dec.21 ×109:21 Sep.21 oct.21 Janil Aprili May 22 11122 22 22 Apr-22 2,919 3,127 208 7.1% 3.212 3.488 May-22 276 8.6% lanned.. Actual... Jun-22 3.500 3,799 299 8.5% Target and Acceptable Variance ± 15% **Acceptable Variance**

SOURCE OF DATA: Jobs P6322 (KPI # 04.01.01.03)

1. BACKGROUND / PURPOSE

STATUS:

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 rotten.
- 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 3,500 poles and the current actual number of poles replaced is 3,799.

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 job 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.

+15%

15%

Jun-22





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

 DEFINITION OF RATES METRIC: Number of Crossarms Replaced Against Plan
 Period

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

STATUS: Within Acceptable Variance

FYTD	Planned	Actual	Vari	ance	Re-Estimate		Crossarm Replacement
as of:	(No.)	(No.)	No.	%			FY 21/22
Jul-21	916	825	-91	-9.9%		11450 - 10450 -	
Aug-21	1,832	1,794	-38	-2.1%		9450	
Sep-21	2,748	2,377	-371	-13.5%		<u></u> 8450 -	-1
Oct-21	3,664	3,322	-342	-9.3%		0 6450 -	.1
Nov-21	4,580	3,755	-825	-18.0%		8450	
Dec-21	5,496	4,065	-1,431	-26.0%		i 4450 +	1
Jan-22	6,412	5,003	-1,409	-22.0%		Z 3450 - 2450 -	1
Feb-22	7,328	6,409	-919	-12.5%		1450	
Mar-22	8,244	8,036	-208	-2.5%		450 +	
Apr-22	9,160	9,019	-141	-1.5%			Angle Service way peer sand south and har
May-22	10,076	9,917	-159	-1.6%] 5	
Jun-22	11,000	11,087	87	0.8%			- Planned Actual

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 11,000 crossarms and the current actual number of crossarms replaced is 11,087. This includes wildfire hardening which has been identified and based on the urgency, includes replacement.

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

- The number of crossarms replaced falls within the ±15% threshold.
- PTD constantly monitors crossarm replacement activity and adjusts work and resources as needed throughout the year.
- Division's focus changes with the weather and operating needs. During the summer months, crossarm replacements decrease due to the majority of field crews focused on replacing overload transformers due to heat storms and fall winds.
- 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.

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

 PTD will monitor this job to ensure goals are met.

Exceeds Target



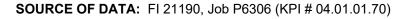
RESPONSIBLE MANAGER: Vincent Zabukovec Vincent Jahrhow REPORTING PERIOD: June 2022

Power Engineering and Technical Services Division 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	Planned	Actual	Variance		Re-Estimate
as of:	(Mile)	(Mile)	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	47.5	1.5	3.3%	
Jun-22	50.0	51.9	1.9	3.8%	
	Acceptab	le Variance	±	15%	



1. NARRATIVE / BACKGROUND

Cable replacement of 4.8-kV and 34.5-kV cables for additional system reliability due to deterioration, overload, obsolescence and damage.

2. CRITERIA

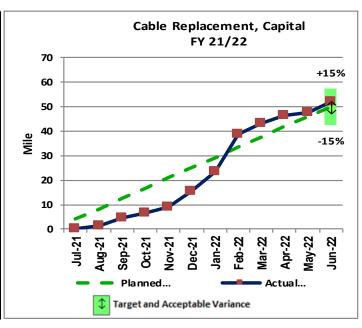
- Frequency of failures
- Cable age •
- Physical deteriorations: cracks, bulging

ACHIEVEMENTS 3.

Through the month of June, Distribution Construction & Maintenance completed 51.9 circuit-miles, surpassing the goal of completing 50 circuit-miles for Fiscal Year 21/22.

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

Variance through the month of June is 1.9 circuitmiles, 3.8% 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 \$20.3M 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

Key Performance Index goal has been met for FY 21/22. For FY 22/23, distribution circuit design engineers are continuing to compile lists of cable replacement jobs under construction, identifying which jobs are completed or close to being completed and working 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

RESPONSIBLE MANAGER: David Hanson, Power Transmission and Distribution

DEFINITION OF RATES METRIC: Average Unit Cost per Transformer TARGET & ACCEPTABLE VARIANCE (FY 21/22 Target = \$9.1K per transformer: Acceptable Variance = ± 15%

Within Acceptable Variance STATUS:

FYTD	Approved Budget /	Actual	Variance		Re-Estimate		
as of:	Planned		Unit or \$	%	(If Applicable)		
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	8.7	(0.4)	-4.4%			
Jun-22	9.1	8.5	(0.6)	-6.6%			
	Acceptable Variance ± 15%						

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

1. BACKGROUND / PURPOSE

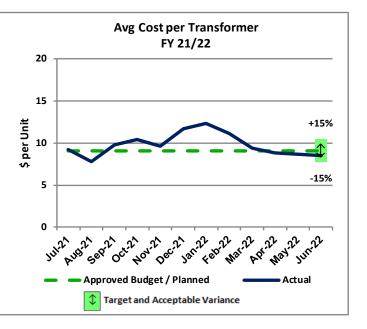
Identify and replace 1050 distribution transformers to increase reliability and maintain compliance with California Public Utilities Commission (CPUC) General Order 165-Inspection Cycles for Electric Distribution Facilities. Power Transmission and Distribution (PTD) has a target replacement cost of \$9.1K per unit.

2. ACHIEVEMENTS / MILESTONES MET

As of June 30, the target was to replace 1,050 transformers at 100% of the fiscal year-end goal. PTD has completed replacement of 1,183 transformers, which is 113% of the fiscal year goal with a current average cost of \$8.5K 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



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average unit cost per transformer was brought within the acceptable variance in February 2022 due to closing a large number of outage incident jobs.

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.

LADWP RATES METRIC – Average Unit Cost per Pole (Power) **REPORTING PERIOD:** June 2022

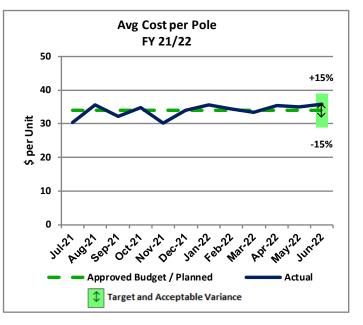
RESPONSIBLE MANAGER: David Hanson, Power Transmission and Distribution

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	Approved Budget /	Actual	Variance		Re-Estimate		
as of:	Planned		Unit or \$	%	(If Applicable)		
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	35	1.1	3.2%			
Jun-22	33.9	35.8	1.9	5.6%			
	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 June 30, the fiscal year-end target was to replacement 3,500 power poles at 100% of the fiscal year goal. PTD has completed replacement of 3,799 power poles, which is 109% of the fiscal year goal with a current average cost of \$35.8K 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 5.6% 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

Exceeds Target

PTD will monitor and audit unit costs in addition to working with Power Transmission Planning,

Regulatory, 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.

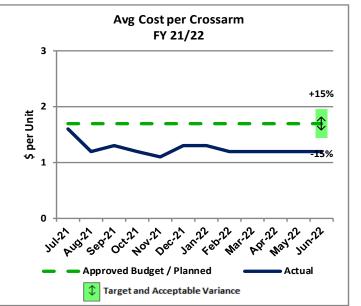
LADWP RATES METRIC – *Average Unit Cost per Crossarm (Power)* **REPORTING PERIOD:** June 2022

RESPONSIBLE MANAGER: David Hanson, Power Transmission and Distribution

DEFINITION OF RATES METRIC: Average Unit Cost per Crossarms

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

<u>STATUS:</u>	Exe	ceeds Targe					
FYTD	Approved Budget /	Actual	Variance		Re-Estimate		
as of:	Planned		Unit or \$	%	(If Applicable)		
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	1.2	(0.5)	-29.4%			
Jun-22	1.7	1.2	(0.5)	-29.4%			
	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.

2. ACHIEVEMENTS / MILESTONES MET

As of June 30, our fiscal year end goal was to replace 11,000 crossarms, which is 100% of the fiscal year goal. PTD has completed the replacement of 11,087 crossarms, which is 101% of the FY goal, with a current average cost of \$1.2K per unit.

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 June, the average cost is \$1.2K, which is 29.4% under the acceptable target. Crossarm replacement costs will fluctuate depending on the difficulty factor of the crossarm replacement. Contributing factors can be conductor size, whether or not equipment is installed on

Within Acceptable Variance



crossarm, if conductor terminates on crossarm or if crossarm has conductor carrying more than one voltage.

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.

LADWP RATES METRIC – Average Unit Cost per Mile of Cable (Power) **REPORTING PERIOD:** June 2022

RESPONSIBLE MANAGER: David Hanson, Power Transmission and Distribution

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	Approved Budget /	Actual	Variance		Re-Estimate	
as of:	Planned	, lotaal	Unit or \$	%	(If Applicable)	
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	1512.2	180.5	13.6%		
Jun-22	1331.7	1491.3	159.6	12.0%		
	Accepta	15%				

Avg Cost per Mile of Cable FY 21/22 20000 18000 16000 14000 12000 10000 8000 6000 4000 +15% 2000 0 -15% N octili Howith Janili s^ 0^{eci} Approved Budget / Planned Actual Target and Acceptable Variance

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 June totals 51.9 miles.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- Average cost per mile of cable is \$1,491.3K which is within the acceptable target for the month of June.
- Multiple large scale 4.8kV and 34.5kV cable replacement projects have been completed in the month of June. 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.

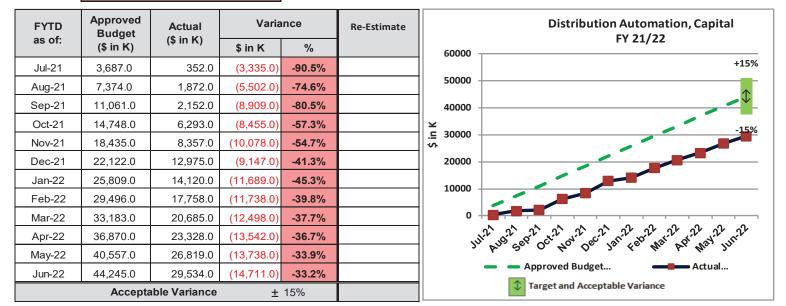
LADWP RATES METRIC - Distribution Automation (Power)

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

REPORTING PERIOD: June, 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



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

• 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

Within Acceptable Variance

Exceeds Target



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 due to new installation crews. Expenditure through June, and total for the FY, is \$29.5M.

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

 Several orders for additional equipment were placed well in advance to mitigate potential supply chain issues, and will continue to be received.



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

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

REPORTING PERIOD: June, 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)	In progress

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 552 pole-top communication equipment installed.

3. <u>PERFORMANCE / VARIANCE ANALYSIS</u>

& 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.



Within Acceptable Variance

Water System

LADWP RATES METRIC – WATER DISTRIBUTION INFRASTRUCTURE POSITIONS (WATER)

REPORTING PERIOD: June 2022

Distribution Infrastructure Vacant Positions FY 21-22

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%

> 160 140

0

Number of Vacant Positions

STATUS: **Outside Acceptable Variance**

FYTD	Planned	Actual	Variance		Re-Estimate		
as of:	Vacancies	Vacancies	# Vacancies	%	(If Applicable)		
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	132	79	149.1%			
Jun-22	43	134	91	211.6%			
	Acceptable Variance ± 15%						

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 has hired 81 field positions throughout fiscal year 2021/22 and netted 3 new field employees.



Maril APT-22 Waysy

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Target and Acceptable Variance

octil

Planned Vacancies

H04.21

Sep.21

15%

Jun

Actual Vacancies

Current rate of hiring budgeted positions is outside the acceptable variance. The Division continues targeted hiring of field positions to ensure adequate staffing dedicated to infrastructure replacement. However, due to retirements, internal transfers, promotions, and attrition the Division was not able to reduce the number of vacant budgeted field positions to 43 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.

Exceeds Target

 In order to increase the number of net new field positions in the future, the Division is working on increasing Administrative Staff in an effort to be able to process more hiring packages and increase the ability to train new staff.

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

REPORTING PERIOD: June 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

RESPONSIBLE MANAGER: April Thang

FYTD	Approved Budget /	Actual	Varia	ance	Re-Estimate	Water Supply Cost - Capital
as of:	Planned		Unit or \$	%	(If Applicable)	FY 21/22 +10%
Jul-21	7,196	5,010	-2,186	-30.4%		90000
Aug-21	14,392	7,604	-6,788	-47.2%		80000
Sep-21	21,589	11,602	-9,987	-46.3%		7000010%
Oct-21	28,785	14,672	-14,113	-49.0%		8 60000 + 50000
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%		20000
Feb-22	57,570	31,032	-26,538	-46.1%		10000
Mar-22	64,766	33,786	-30,980	-47.8%		
Apr-22	71,962	35,129	-36,833	-51.2%		und george oct North Start Control Dec & Dan & Control March March March March
May-22	79,158	37,233	-41,925	-53.0%		
Jun-22	86,362	39,366	-46,996	-54.4%		Actual
	Accepta	ble Variance	±	10%		Target and Acceptable Variance

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

1. BACKGROUND / PURPOSE

- Water supply costs include both current supply of water 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 June 2022, the David M. Gonzalez Park and Valley Plaza Park Projects received a combined \$917K of Safe Clean Water Program funding disbursement for Round 2 projects.
- The Tujunga Spreading Grounds Enhancement Project Ribbon Cutting Event was held on June 30, 2022, at the open

space community area, which signifies the completion of the project.

- In May 2022, received Safe Clean Water Program (SCWP) Round 1, 2nd funding disbursement (FY21/22) in the amount of \$8,326,679.21 for the Valley Village Park, Fernangeles Park, and Strathern Park North Stormwater Capture Projects.
- 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. The Strathern Park Stormwater Capture Project and the Stormwater Capture Parks Program are experiencing delays related to the execution of the implementation of the Memorandum of Agreements until a resolution is reached with Los Angeles Sanitation (LASAN) regarding the O&M issues. The negotiation has been escalated to a higher level and we are hoping that the issues can be resolved by January 2023.
- Water Conservation Water Funded jobs are contributing to the underrun. There was a significant decrease in demand for commercial and residential rebates from our customers. In addition, all in-house direct

install programs with other participating utilities have been impacted by the COVID-19 pandemic.

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

The Water System will continue monitoring • the costs to ensure they are in line with the approved budget.

Within Acceptable Variance Outside Acceptable Variance

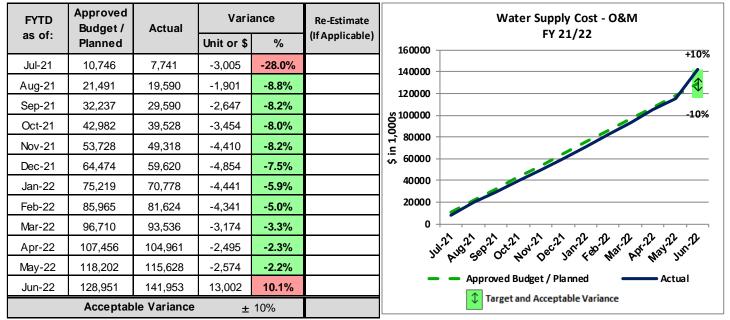
LADWP RATES METRIC – WATER SUPPLY COSTS BUDGET VS ACTUAL-0&M (Water)

REPORTING PERIOD: June 2022

DEFINITION OF RATES METRIC: Board approved annual budget vs actual expenditures. **TARGET & ACCEPTABLE VARIANCE (FY 21/22):** \$128,951K, ±10 percent

STATUS: Outside Acceptable Variance

RESPONSIBLE MANAGER: April Thang



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 644 preventative maintenance tasks for 96 pump station facilities and 426 regulatory bi-weekly maintenance on 45 emergency backup IC Engine units located throughout the Water System.
- There have been eight complete retro fits at both the Valley and Metro Pressure Regulating Stations.

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

 The YTD overrun is primarily due to Hyperion AWPF Construction MOU Payments to LASAN. Typically, there are delays in receiving invoices from LASAN and it was not expected that the invoices would be received before the close of the FY. However, once the three invoices were received for work completed this fiscal year, totaling \$14 million, the invoices were processed with the understanding that there would be an overrun for the Hyperion AWPF Engineering Design job.

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

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

Within Acceptable Variance

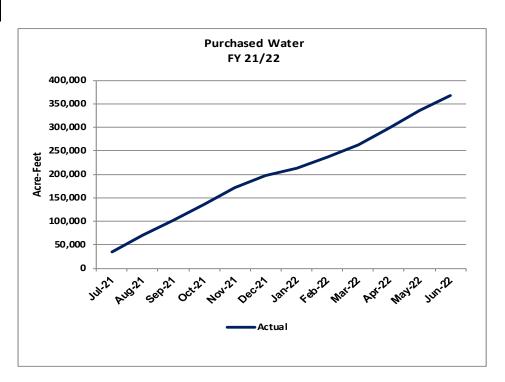


LADWP RATES METRIC – Purchased Water (Water)

REPORTING PERIOD: June 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	336,572				
Jun-22	368,257				



SOURCE OF DATA: Monthly Metropolitan Water District invoices.

1. BACKGROUND / PURPOSE

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

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

- 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.

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

- 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.

LADWP RATES METRIC - RECYCLED WATER DELIVERED (Water)

Digitally signed by Jianping Hu Date: 2022.08.16 15:20:16 -07'00' REPORTING PERIOD: June 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	Purchased Water FY 21/22
Jul-21	1,554	12,000
Aug-21	2,932	10,000
Sep-21	4,116	8,000
Oct-21	4,906	Fee
Nov-21	5,733	ຍູ່ 6,000 V
Dec-21	6,506	4,000
Jan-22	6,951	2,000
Feb-22	7,562	0
Mar-22	8,489	JULY AUGY SEPT OCTA NOVA DECA JERAL REPAR NET APT AND JURAL
Apr-22	9,586	2 62 02 02 02 22 62 M2 62 M2 20
May-22	10,684	Actual
Jun-22	12,018	

SOURCE OF DATA: Customer Recycled Water Meter Reads

RESPONSIBLE MANAGER: Jianping Hu Jianping Hu

1. BACKGROUND / PURPOSE

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

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

• The recycled water deliveries met the FY 21/22 forecast.

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

- 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.

+10%

10%

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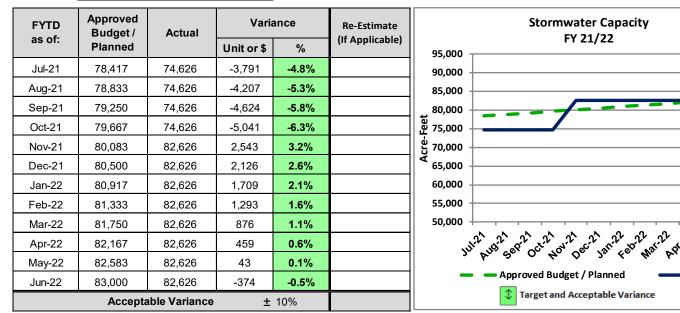
Actual

Way

LADWP RATES METRIC – STORMWATER CAPACITY (Water) RESPONSIBLE MANAGER: David R. Pettijohn With Provide Provide

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



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 longterm 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), 15% complete.
 - San Fernando Regional Park Infiltration Project (446 AFY), 5% complete.

- Projects in design/planning include:
 - 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.
- The Silver Lake Reservoir Stormwater Capture Project (63 AFY) has been removed since May 2022 because it was officially cancelled due to high cost per acre-foot and insufficient resources for operations and maintenance.

4. MITIGATION PLAN AND/OR RECOMMENDATIONS

Continue ongoing work as planned.

Exceeds Target

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

RESPONSIBLE MANAGER: Darin Willey

REPORTING PERIOD: June 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	Approved Budget /	Actual	Vari	ance	Re-Estimate	· · · ·
as of:	Planned		\$	%	(If Applicable)) FY 21/22
Jul-21	2,526	790	-1,736	-68.7%		35000 +10%
Aug-21	5,053	1,929	-3,124	-61.8%		
Sep-21	7,579	4,106	-3,473	-45.8%		30000
Oct-21	10,105	6,355	-3,750	-37.1%		-10%
Nov-21	12,632	9,400	-3232	-25.6%		
Dec-21	15,158	11,492	-3666	-24.2%		v. 15000
Jan-22	17,685	13,370	-4315	-24.4%		10000
Feb-22	20,211	14,937	-5274	-26.1%		5000 -
Mar-22	22,737	16,344	-6393	-28.1%		
Apr-22	25,264	16,747	-8517	-33.7%		Jury may control on the same to the the they inter the short the s
May-22	27,790	17,921	-9869	-35.5%		
Jun-22	30,320	19,656	-10664	-35.2%		Actual
	Acceptabl	e Variance	±	10%		Target and Acceptable Variance

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

1. BACKGROUND / PURPOSE

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

2. ACHIEVEMENTS / MILESTONES MET

- Los Angeles Aqueduct Top Removal Project is 100% complete.
- Project Planning and Development has been requested to take over the planning of the Grant Lake Roto Valve Project. Due to additional Scope of Work, the Project will be re-evaluated and reported with update when it reaches the next milestone.
- Walker Slide Gate Replacement Project is 100% complete.
- Updated designs are needed for the Grant Lake Spillway Modification Project. Designs are approximately 80% complete. Construction will start around Spring 2023.
- 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 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

Exceeds Target

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

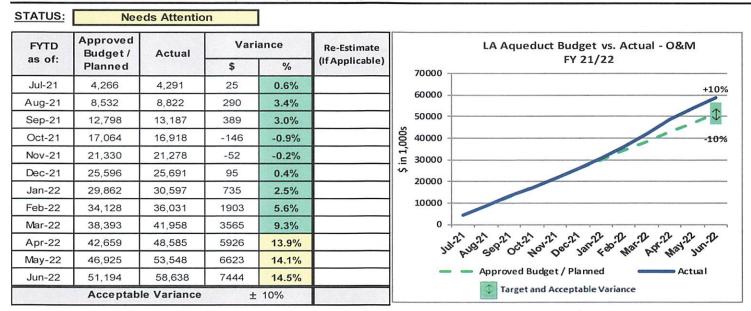
LADWP RATES METRIC – LA AQUEDUCT BUDGET VS ACTUAL – 0&M

RESPONSIBLE MANAGER: Darin Willey

REPORTING PERIOD: June 2022

37

DEFINITION OF RATES METRIC: Board approved annual budget vs actual expenditures. TARGET & ACCEPTABLE VARIANCE (FY 21/22) \$51,194, 10 percent



SOURCE OF DATA: Fls 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 310 acres for resource clearing;
- Graded 271 miles of roads;
- Mowed 334 miles of canals and ditches;
- Cleaned 61 miles of canals and ditches;
- Installed 14 miles of fencing;
- Installed 95 data logger/station retrofits.

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

 Aqueduct continues to focus on operations and maintenance work as several Capital projects are delayed. Thus, crews have been able to perform substantial O&M and resource management.

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

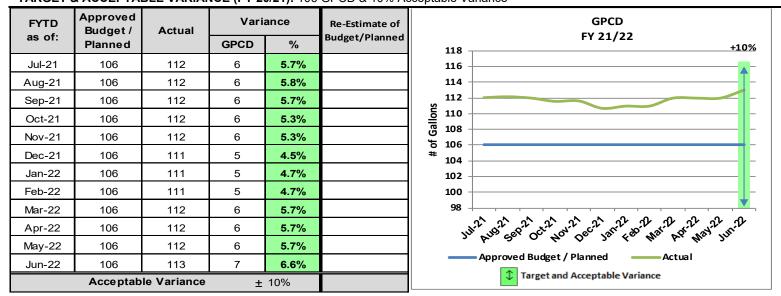
 Crews will continue performing substantial facility maintenance at Mojave and Dry Canyon, as well as continue working towards Operational and Maintenance goals set for FY 21/22.

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

RESPONSIBLE MANAGER: Terrence McCarthy Juneme Mlanty

REPORTING PERIOD: June 2022

DEFINITION OF RATES METRIC: Level of water conservation against target GPCD. TARGET & ACCEPTABLE VARIANCE (FY 20/21): 106 GPCD & 10% Acceptable Variance



SOURCE OF DATA: Water Operations Monthly Supply Tracking

1. BACKGROUND / PURPOSE

- Gallons per capita per day (GPCD) is a measure of the City's progress in water conservation. The Mayor's Sustainable City pLAn set GPCD reduction goals of 20, 22.5, and 25 percent by 2017, 2025, and 2035, respectively.
- Governor Newsom declared a statewide drought emergency on October 19, 2021.

2. ACHIEVEMENTS / MILESTONES MET

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

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

- Customer water per capita use has remained constant and slightly decreasing due to effective messaging and Phase III restriction adoption by customers.
- 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.

- LADWP has seen a 9% decrease in supply deliveries compared to June 2021, despite hotter temperatures.
- Population estimates for LADWP's Service area were updated, showing a decline in overall population. This change results in GPCD appearing to increase, although supply deliveries have decreased.

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

- LADWP will continue to support customer water use efficiency practices through its rebate programs, conservation messaging, educational programs, and other innovative solutions.
- LADWP will increase it's emergency water conservation ordinance implementation from Phase II to Phase III starting June 1st to curb water demand by limiting outdoor irrigation to two days a week.

Exceeds Target

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

REPORTING PERIOD: June 2022

39

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

RESPONSIBLE MANAGER: April Thang

FYTD	Approved Budget /	Actual	Variance		Re-Estimate	Fixed Assets Replacement Budget	
as of:	Planned		\$	%	(If Applicable)	FY 21/22	
Jul-21	25,687	24,444	-1,243	-4.8%		+10%	
Aug-21	51,373	55,094	3,721	7.2%		300000	
Sep-21	77,060	81,952	4,892	6.3%			
Oct-21	102,747	107,485	4,738	4.6%		-10%	
Nov-21	128,434	127,296	-1,138	-0.9%		, 2 200000	
Dec-21	154,120	153,829	-291	-0.2%		v150000	
Jan-22	179,807	184,349	4,542	2.5%		100000	
Feb-22	205,494	214,689	9,195	4.5%		50000	
Mar-22	231,181	247,308	16,127	7.0%			
Apr-22	256,867	276,096	19,229	7.5%		JULY AUG SEP OCT NOV DEC'S SALLED HAT AND WAY SUNCH	
May-22	282,554	305,372	22,818	8.1%			
Jun-22	308,260	337,139	28,879	9.4%		Actual	
	Accepta	ble Variance	±	10%		Target and Acceptable Variance	

SOURCE OF DATA: Fls 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 June 2022:

- 196,491 feet of mainline have been installed.
- 5,968 feet of the open trench portion of 54inch diameter earthquake resistant pipe, Foothill TL Unit 3 Phase II, have been installed.
- 17 pumps were replaced/retrofitted.
- 8 Regulator/Relief Stations were retrofitted.
- The North Haiwee Dam No. 2 Project has completed realigning approximately 4,400

feet of Cactus Flats Road and asphaltpaving the road.

- Tinemaha Dam Replacement Project:
 - Wastewater Compliance Group retained an Environmental Consultant to purge and sample two observations wells at Tinemaha Reservoir. The well samples will be used to establish a water quality baseline, a requirement to obtain a discharge permit for the pumping tests.
 - The Water System Legislation and Grants Group, in collaboration with WETS Project Planning and Development, submitted the High Hazard Potential Dam (HHPD) Intent Application to the Department of Water Resources (DWR). The HHPD grant program provides technical, planning, design, and construction assistance for eligible rehabilitation activities that reduce dam risk and increase community preparedness.
 - 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 the east side outlet alternative in October 2021.
- Green Verdugo Reservoir Floating Cover Replacement Project:
 - The project construction is 90% complete.
 - The contractor has completed paving of the reservoir perimeter road and completion of the floating cover is pending installation of the rainwater removal pumps.
 - The floating cover contractor completed chafer installation on the reservoir slopes in December 2021.
 - LADWP crews continue working on the control building and areas outside of the reservoir.

- 3. <u>PERFORMANCE / VARIANCE ANALYSIS</u> <u>& YEAR END PROJECTION</u>
 - The rate of Fixed Assets Replacement was within acceptable variance for the reporting period.

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

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

Within Acceptable Variance

LADWP BATES METRIC – MAINLINE REPLACEMENT (Water)

RESPONSIBLE MANAGER: Breonia Lindsey/Sandra Foster **DEFINITION OF RATES METRIC:** Feet of mainline replaced against plan. TARGET & ACCEPTABLE VARIANCE (FY 21/22): 195,000 feet, ±10%

FYTD	Approved Budget /	Actual	Variance		Re-Estimate	
as of:	Planned		Feet	%	(If Applicable)	250000 -
Jul-21	7,738	7,738	0	0.0%		
Aug-21	22,024	22,024	0	0.0%		200000 -
Sep-21	34,341	34,341	0	0.0%		eet
Oct-21	52,834	53,313	479	0.9%		ື້ 150000 - ້ວ
Nov-21	69,516	66,179	-3337	-4.8%		
Dec-21	84,079	75,966	-8113	-9.6%		Number Number
Jan-22	100,105	90,615	-9490	-9.5%		50000 -
Feb-22	117,086	107,423	-9663	-8.3%		
Mar-22	137,248	132,558	-4690	-3.4%		o 4
Apr-22	157,731	157,590	-141	-0.1%		Jul
May-22	180,495	173,012	-7483	-4.1%		3 *
Jun-22	195,000	196,491	1491	0.8%		-
	Acceptab	le Variance	±	10%		

SOURCE OF DATA: FI 26331, Job 30067

1. BACKGROUND / PURPOSE

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

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

Hours

Approved Budget / Planned

Oet

Target and Acceptable Variance

Maril

.n

Actual

P

The rate of mainline replacement for this reporting period is within the acceptable variance. The Division has met and surpassed its goal for this fiscal year of 195,000 feet of mainline replacement. The Division continues targeted hiring of field positions to ensure adequate staffing dedicated to infrastructure replacement.

2. ACHIEVEMENTS / MILESTONES MET

As of June 2022, the Division has replaced 196,491 feet of mainline, exceeding its goal of replacing 195,000 feet of mainline by the end of the fiscal year.

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 vears and meet customer demand for new installations.

+10%

10%

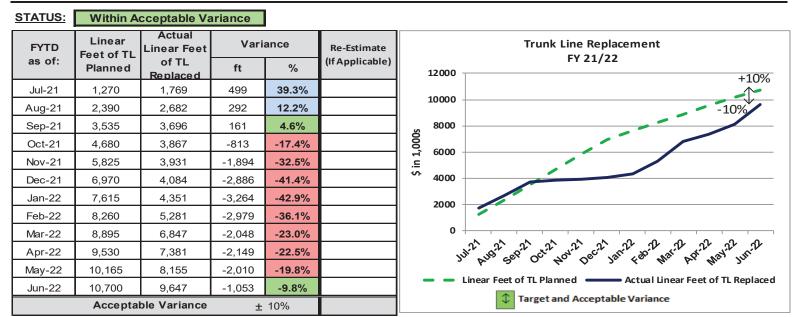
REPORTING PERIOD: June 2022

Mainline Replacement FY 21/22

LADWP RATES METRIC – TRUNK LINE REPLACEMENT (Water) Milad Taghavi Digitally signed by Milad Taghav Date: 2022.08.24 10:39:50 -07'00'

REPORTING PERIOD: June 2022

DEFINITION OF RATES METRIC: Feet of trunk line replaced against the plan. TARGET & ACCEPTABLE VARIANCE (FY 21/22): 10,700 feet, 10 percent



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

1. BACKGROUND / PURPOSE

RESPONSIBLE MANAGER: Milad Taghavi

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.

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 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.
- 773 feet of trunk line was installed on Century Trunk Line Unit 1 Phase 1 through June 2022.
- 2,638 feet of trunk line was installed on City Trunk Line South Unit 3 through June 2022.
- 1,242 feet of trunk line was installed on Foothill Trunk Line through June 2022.
- 1,531 feet of trunk line was installed on Coronado Trunk Line through June 2022.

- 779 feet of trunk line was installed on City Trunk Line North Unit 2 through June 2022.
- 1.036 feet of trunk line was installed on River Supply Conduit (RSC) Upper Reach Unit 7 Project through June 2022.
- 1,000 feet of trunk line was installed on River Supply Conduit (RSC) Lower Reach Unit 1A Project through June 2022.

3. PERFORMANCE / VARIANCE ANALYSIS AND YEAR-END PROJECTION

The rate of trunk line replacement is within acceptable variance for the reporting period.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

Continue ongoing and additional trunk line replacement projects to meet future goals.

LADWP RATES METRIC – METER REPLACEMENT (Water)

RESPONSIBLE MANAGER: Breonia Lindsey/Sandra Foster

DEFINITION OF RATES METRIC: Number of meters replaced against plan. TARGET & ACCEPTABLE VARIANCE (FY 21/22): 32,500 meters, ±10%

REPORTING PERIOD: June 2022

Within Acceptable Variance Approved Variance **Meter Replacement** FYTD Re-Estimate Budget / Actual FY 21/22 as of: (If Applicable) % Planned Meters 40000 0.0% Jul-21 2,615 2,615 0 35000 4,964 4,964 0 0.0% Aug-21 30000 Number of Meters Sep-21 7.412 7.412 0 0.0% 25000 Oct-21 10,269 10,098 -171 -1.7% 20000 Nov-21 12,776 12,481 -295 -2.3% 15000 -512 -3.3% Dec-21 15,360 14,848 10000 -1246 -6.9% Jan-22 18,136 16,890 5000 Feb-22 20,672 19,932 -740 -3.6% 0 Mar-22 23,529 23,713 184 0.8% H04.21 Decili sep oct w Apr-22 26,424 27,682 1258 4.8% May-22 29,527 31,122 1595 5.4% Approved Budget / Planned 32,500 34,360 5.7% Jun-22 1860 Target and Acceptable Variance ÷. Acceptable Variance ± 10%

STATUS:

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 June 2022, the Division has exceeded its fiscal year goal of 32,500, successfully replacing a total of 34,360 meters.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

Jan22 +20-il Ward Aprili

The rate of meter replacement for this reporting period is within the acceptable variance, and has surpassed the fiscal year 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.

+10%

10%

Jun:2

Actual

Nor

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

RESPONSIBLE MANAGER: Milad Taghavi

REPORTING PERIOD: June 2022

DEFINITION OF RATES METRIC: Board approved annual budget vs actual expenditures. **TARGET & ACCEPTABLE VARIANCE (FY 21/22):** \$323M, 10 percent

STATUS:	Ex	ceeds Targe	t
FYTD	Approved Budget /	Actual (in	Varia

FYTD	Budget /	Actual (in	Vari	ance	Re- Estimate	Water Quality Budget - Capital
as of:	Planned (in 1.000)	1,000)	\$	%	(If Applicable)	FY 21/22 400,000 +10%
Jul-21	\$ 26,897	\$ 30,315	3,888	13.0%		350,000
Aug-21	\$ 53,794	\$ 46,032	-5,868	-9.8%		-10%
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%		150,000
Jan-22	\$ 188,280	\$ 198,652	10,372	5.5%		100,000
Feb-22	\$ 215,177	\$ 229,235	14,058	6.5%		50,000
Mar-22	\$ 242,074	\$ 277,880	35,806	14.8%		
Apr-22	\$ 268,971	\$ 299,105	30,134	11.2%		July Ling Ser Oct Nov Dec Jan Les War Aril 12 July
May-22	\$ 295,868	\$ 331,150	35,282	11.9%) 2 2 0 4 0 2 4 M P. W 2
Jun-22	\$ 322,780	\$ 372,435	49,655	15.4%		
	Acceptab	le Variance	±	10%		Target and Acceptable Variance

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.

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.

- Tujunga Centralized Treatment: As of June 2022, construction reached 63% complete. Second UV reactor have been set, Peroxide Dosing wall #1 has been completed.
- North Hollywood Centralized Treatment: As of June 2022, construction reached 58% complete. The crane in the UVAOP building has been tested and the vacant properties on Morella Ave. have been demolished to accommodate the future Backwash Waste Tank.
- Hollywood West Wellhead Treatment: As of June 2022, construction reached 90% complete.
- Headworks Flow Control Station: As of June 2022, the contractor continues to install pipe, excavate, and install shoring.

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

 North Hollywood Centralized Treatment and Tujunga Centralized Treatment increased Year-To-Date (YTD) expenditures are due to accelerated construction.

- Hollywood West Wellhead Treatment has increasing expenditures for Power Construction & Maintenance (PC&M) construction charges, Owner's Agent consulting charges, and material procurement.
- The contract for Headworks Flow Control Station has been amended to reflect project scope changes and additional construction expenditures.
- LA Res UV Disinfection Plant increased YTD expenditures are a result of the 2nd amendment to extend the construction contract to compensate for COVID-19 impacts on productivity.

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

• Continue ongoing work as planned.



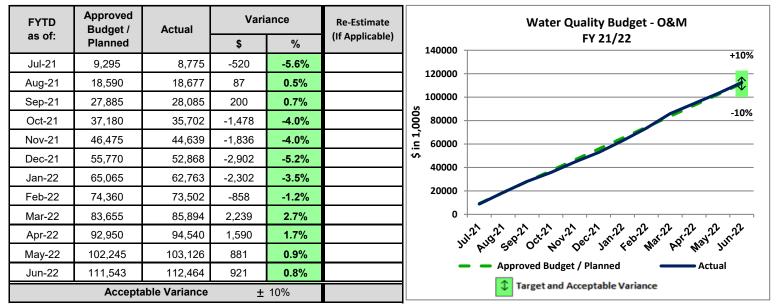
LADWP RATES METRIC – WATER QUALITY BUDGET VS ACTUAL-0&M

REPORTING PERIOD: June 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

RESPONSIBLE MANAGER: Nelson Mejia



SOURCE OF DATA: Fls 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 7,504 groundwater samplings required for regulatory permits and Prop 1 Grant Program projects.
- Water Quality Control collected 30,958
 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 through HSIP partnerships with reimbursements totaling \$538,408.
- Community Outreach-Water Quality Customer Care collaborated with two nonprofit 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 communicate 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. <u>PERFORMANCE / VARIANCE ANALYSIS</u> <u>& YEAR END PROJECTION</u>

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

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

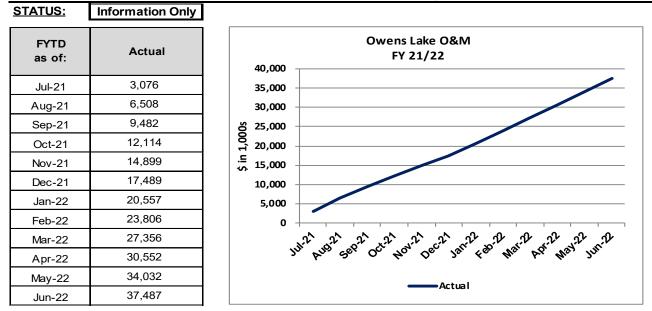
 Expenditure progress will continue to be carefully monitored through the Water System monthly financial and variance reports.



LADWP RATES METRIC –BUDGET VS ACTUAL FOR OWENS LAKE O&M [Water]

REPORTING PERIOD: June 2022

DEFINITION OF RATES METRIC: Board approved annual budget vs. actual expenditures TARGET& ACCEPTABLE VARIANCE (FY 21/22): N/A – for information only



SOURCE OF DATA: FIs 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.

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.
- 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.

- O&M staff has completed work related to a re-flood order received from the Great Basin District on dust control area, Tillage T-16, as well as Brine, T29-4.
- Completed 54" isolation valve install at T16.

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

• On target.

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

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

Exceeds Target

Joint System

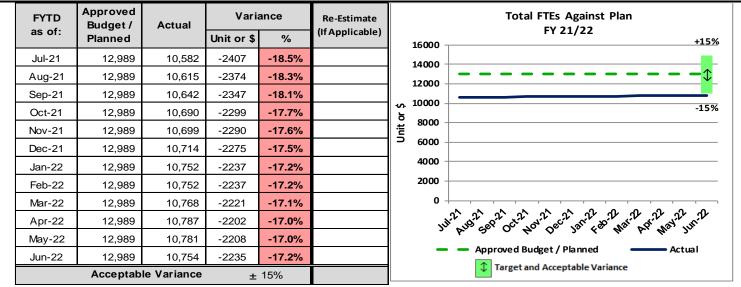
LADWP RATES METRIC Total FTES Against Plan

RESPONSIBLE MANAGER: Monique Earl

REPORTING PERIOD: June 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%



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.

ACHIEVEMENTS / MILESTONES MET 2.

- External Hires = 43
- Attrition = 49
- Net New Employees = -6

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

The variance was caused by an increased APR for Fiscal Year 21-22. Acceptable variance target was expected to be achieved, however Joint, Power and Water Systems did not fill positions to their APR levels. Acceptable variance target has been updated for the new fiscal year.

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)*

REPORTING PERIOD: June, 2022

47

RESPONSIBLE MANAGER: Rita Khurana-Carwile 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 /	Actual	Varia	ance	Re-Estimate (If Applicable)		Financial & Human Resources Replacement Project Total Spending Against Plan
as 01.	Planned		Unit or \$	%	(ii Applicable)	90000	FY 21/22 +15%
Jul-21	6,250.3	1,257.1	-4993	-79.9%		80000	
Aug-21	12,500.6	2,529.8	-9971	-79.8%		70000 -	
Sep-21	18,831.3	5,668.7	-13163	-69.9%		දු 60000 -	
Oct-21	24,841.1	9,837.1	-15004	-60.4%		ຸ ເ ຊ 60000	-15%
Nov-21	30,850.9	12,671.4	-18180	-58.9%		no 40000 –	
Dec-21	36,860.7	15,550.6	-21310	-57.8%		↓ 30000 +	
Jan-22	42,870.5	20,390.7	-22480	-52.4%		20000	
Feb-22	48,880.3	21,753.8	-27127	-55.5%		10000 -	
Mar-22	54,890.1	23,240.9	-31649	-57.7%		o +	
Apr-22	60,899.9	26,186.9	-34713	-57.0%		2111.3	And Bear Oct & Mar theo of San of Bear Way of May of Thurs
May-22	66,909.7	31,071.1	-35839	-53.6%		3	
Jun-22	72,988.9	37,769.8	-35219	-48.3%		-	Approved Budget / Planned Actual
	Accepta	ble Variance	±	15%			Target and Acceptable Variance

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

- 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 in the fall of 2022 for Phase I

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

Exceeds Target

 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)
- Architect Stage activities were delayed however 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

Note: November 2021 – April 2022 'Actual' was slightly adjusted due a calculation typo.

Ranie

Signed: Rita K Carwile September 20, 2022

LADWP RATES METRIC – *Financial and Human Resources Replacement Project Progress Against Schedule (Joint)* RESPONSIBLE MANAGER: Rita Khurana-Carwile RESPONSIBLE MANAGER: Rita Khurana-Carwile

RESPONSIBLE MANAGER: Rita Khurana-Carwile
Information Technology Program Management Office
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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- 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. <u>PERFORMANCE/VARIANCE ANALYSIS</u> <u>& YEAR END PROJECTION</u>

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

Exceeds Target

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

Outside Acceptable Variance

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)
- Architect Stage activities were delayed however no impact to the overall critical path of the project

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

Ranie

Signed: Rita K Carwile September 20, 2022

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

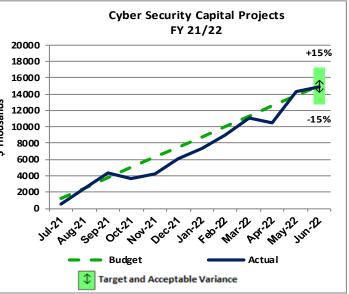
RESPONSIBLE MANAGER: Stephen Kwok

REPORTING PERIOD: June 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: Within Acceptable Variance

	Re-Estimate	ance	Varia	Actual	Budget	FYTD
	(If Applicable)	%	Unit or \$		Ū	as of:
		-55.8%	-700	553.8	1254	Jul-21
		-2.2%	-55	2452.9	2508	Aug-21
<u> </u>		14.2%	533	4295.6	3763	Sep-21
S Thousands		-28.1%	-1411	3605.3	5017	Oct-21
pon		-32.9%	-2063	4207.6	6271	Nov-21
ŠT		-19.0%	-1429	6096	7525	Dec-21
		-15.6%	-1371	7408.5	8779	Jan-22
		-10.0%	-1005	9028.6	10033	Feb-22
		-2.5%	-280	11007.2	11288	Mar-22
		-16.3%	-2049	10492.9	12542	Apr-22
		3.6%	495	14291.5	13796	May-22
		-1.2%	-184	14866.8	15050	Jun-22
		15%	±	le Variance	Acceptab	



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 reengineer LADWP's cybersecurity systems and processes to meet business needs and address potential cyber threats.

2. ACHIEVEMENTS / MILESTONES MET

- Tested and validated M365 migration plan and pilot.
- Completion of breach attack simulation and validation.
- Completion of data governance interview with department stakeholders.
- Completion of compliance management use cases.

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

Labor cost for Cyber bench contract 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 continue to be outstanding due to minor billing related issues which are actively being addressed.

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

We will continue to monitor and work with contracted vendor, Supply Chain Services, and Accounts Payable to address billing related issues.

LADWP RATES METRIC – *Customer Information System Upgrades (Joint)*

RESPONSIBLE MANAGER: Annamae Peji

REPORTING PERIOD: June 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	Budget	Actual	Varia	ance	Re-Estimate	Customer Information System Upgrades	
as of:			Unit or \$	%	(If Applicable)	25000 -	FY 21/22
Jul-21	1467	784.8	-682	-46.5%			+15%
Aug-21	2933	2888.3	-45	-1.5%		20000 -	
Sep-21	4400	3114.7	-1285	-29.2%		ş	↓
Oct-21	5867	3637.9	-2229	-38.0%		L 15000 -	
Nov-21	7334	4205.4	-3128	-42.7%			-15%
Dec-21	8800	4039.6	-4761	-54.1%		\$ F 10000	
Jan-22	10267	4536.7	-5730	-55.8%		5000 -	
Feb-22	11734	4602.5	-7131	-60.8%			
Mar-22	13200	7316.4	-5884	-44.6%		o +	
Apr-22	14667	7013.5	-7654	-52.2%		Jul	AUS SEP OCT NOV DEC JAN & BOTH AND JUNIA
May-22	16134	9199	-6935	-43.0%			
Jun-22	17600	10570.9	-7030	-39.9%			- Budget - Actual
	Acceptable Variance ± 15%					Target and Acceptable Variance	

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. Completed functional and regression testing phase. End to end testing for Autopay in progress. User Acceptance testing (UAT) readiness activities including test case development, data preps and tester assignments were in progress. Organizational readiness and training plans also in progress.

- Completed implementation of California Water and Wastewater Arrearage Payment Program (CWWAPP, Wastewater portion) which applied about \$60M in credits to customer accounts for their sewer arrears.
- Completed development and unit testing phase to support the Low Income Household Water Assistance Program (LIHWAP).
- Completed implementation to support the Customer Connections Survey targeted for Low Income/Lifeline customers to provide additional debt relief of \$15M in credits to accounts of survey respondents.
- Completed Infrastructure Configuration and Unit Testing phase of the Field Collection System (FCS) Upgrade project.
- Completed configuration, testing and implementation of quarterly Water Rate Factors, Sewer Service Charge Winter Water Use (WWU) changes and Outdoor Area Light (OAL) factors for July 2022.

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

Labor costs are lower due to delays in hiring activity to fill vacant positions. Lower labor costs are also related to the delays with the kickoff/implementation of some capital project initiatives (such as Water Trouble Work Management system replacement and AMI).

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

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

Planned purchase of software was deferred to FY 22/23. Additionally, improvements to the invoice submission procedures by the vendors are being addressed.

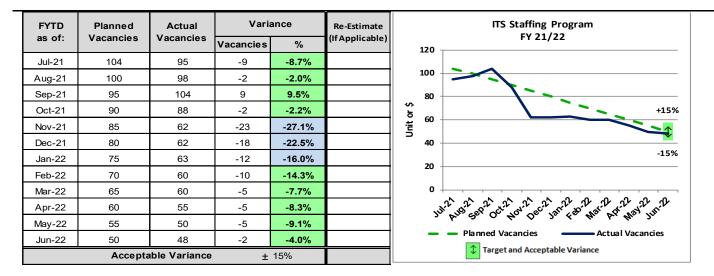


LADWP RATES METRIC – Information Technology Services (ITS) Made Anthony Staffing Program (Joint)

RESPONSIBLE MANAGER: Mark S. Northrup / Analee Klee

REPORTING PERIOD: June 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%)



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

1. BACKGROUND / PURPOSE

Ensure that Information Technology Services (ITS) 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 69 notwithstanding attrition associated with retirement and voluntary separation from service.

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

ITS met and exceeded the target FTE count.

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

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 faster.

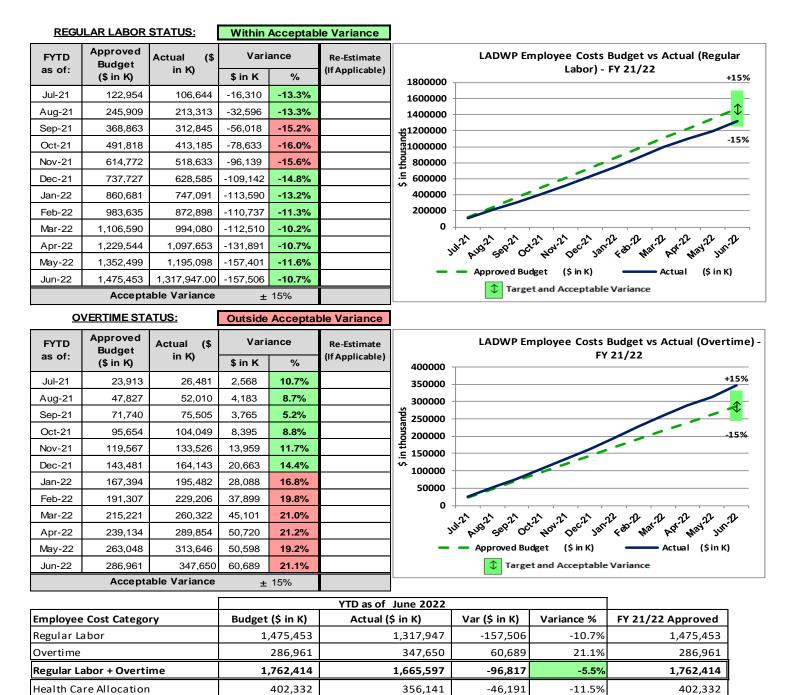
LADWP RATES METRIC – *LADWP EMPLOYEE COST BUDGET VS. ACTUAL* (*LADWP*)

RESPONSIBLE MANAGER: LADWP Senior Management

REPORTING PERIOD: June 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



Retirement & Death Benefit

Total

435,820

2.600.566

-82,956

-225.964

352,864

2.374.602

435,820

2.600.566

-19.0%

-8.7%

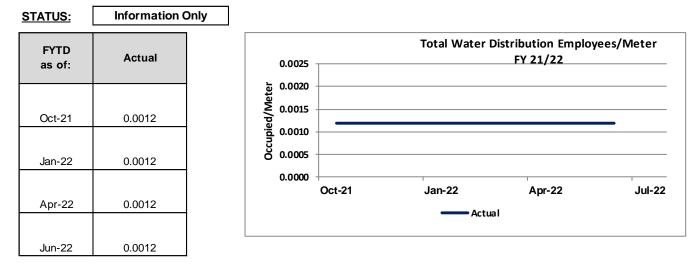
LADWP RATES METRIC – *Total Number of Water Distribution Employees* per Water Customer Meter (Water)

RESPONSIBLE MANAGER: Corporate Performance

REPORTING PERIOD: June 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



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

Total Number of Water Distribution Employees (excluding daily exempt and utility pre-craft trainees) as of June 2022 = 871

10/21		01/22	04/22	06/22
Water	880	877	875	871

Total Number of Water Meters as of June 2022 = 712,162

	10/21	01/22	04/22	06/22
Water	712,246	712,528	712,941	713,162

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

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

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

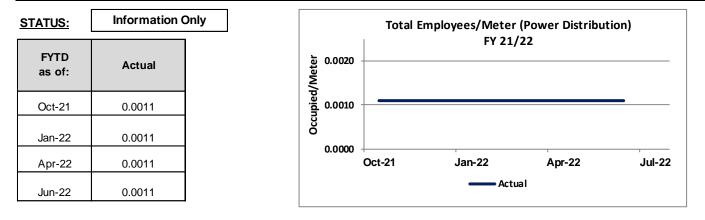
RESPONSIBLE MANAGER: Corporate Performance

REPORTING PERIOD: June 2022

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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



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.

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-intime 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.

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

Total Number of Power Distribution Employees (excluding daily exempt and utility pre-craft trainees) as of June 2022 = 1,726

	10/21	01/22	04/22	06/22
Power	1,757	1,748	1,752	1,726

Total Number of Power Meters as of June 2022 = 1,614,943

	10/21	01/22	04/22	06/22
Power	1,608,813	1,610,906	1,613,762	1,614,943

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

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

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

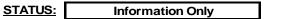
RESPONSIBLE MANAGER: Corporate Performance

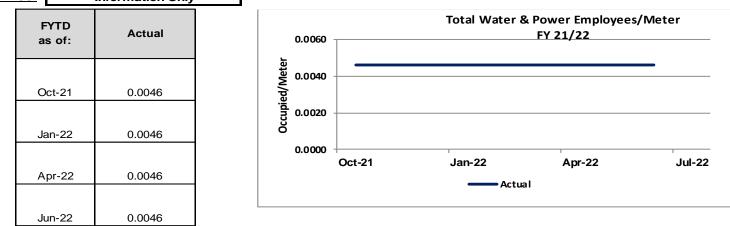
REPORTING PERIOD: June 2022

55

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





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

Total Number of Water and Power Employees (excluding daily exempt and utility pre-craft trainees) as of June 2022 = 10,754

	10/21	01/22	04/22	06/22
Power	5,216	5,236	5,275	5,257
Water	2,177	2,187	2,159	2,146
Joint	3,297	3,329	3,353	3,351
Total	10,690	10,752	10,787	10,754

Total Number of Water and Power Meters as of June 2022 = 2,328,105

	, ,			
	10/21	01/22	04/22	06/22
Power	1,608,813	1,610,906	1,613,762	1,614,943
Water	712,246	712,528	712,941	713,162
Total	2,321,059	2,323,434	2,326,703	2,328,105

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

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

LADWP RATES METRIC - *GHG Emissions Reduction Ratio (Joint)*

RESPONSIBLE MANAGER: Katherine Rubin Katherine Rubin Digitally signed by Katherine Rubin

REPORTING PERIOD: As of June 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

Listanian Tuona

<u>Note</u>: 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:					
СҮ	CO2 Emissions (Metric Tons)	% of 1990 CO2 Emissions			
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%			
2021	7,046,462	39%			

Greenhouse Gas (GHG) Emission Reduction Ratio 20 100% 102% 18 100% 16 83% 79% 80% 78% 75% 80% 73% 14 Million Metric Tons) % of 1990 Level 12 59% 60% 53% 51% 10 46% 42% 39% 8 40% 6 4 20% 2 0 0% 2017 2018 2019 2020 1990 2010 2011 2012 2013 2014 2015 2016 2021

SOURCE: 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. POLICY / 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.
- California Assembly Bill 1279 (Muratsuchi, 2022) establishes state policy to achieve net zero GHG emissions no later than 2045 and reduce anthropogenic GHG emissions to at least 85% by 2045

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

• 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 2021 included 35.2% renewable energy based on LADWP's Power Content Label.
- LADWP's 2021 CO2 emissions are 61% below its 1990 emissions baseline.

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

 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)* Da

RESPONSIBLE MANAGER: David Jacot

REPORTING PERIOD: June 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: Outside Acceptable Variance

FYTD	Energy Savings Actual	Varia	Re-Estimate		
as of:	Goals (GWh)	Addul	Unit or \$	%	(If Applicable)
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	118.5	5	4.4%	
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	310.5	-48	-13.3%	
Jun-22	398.9	338.0	-61	-15.3%	

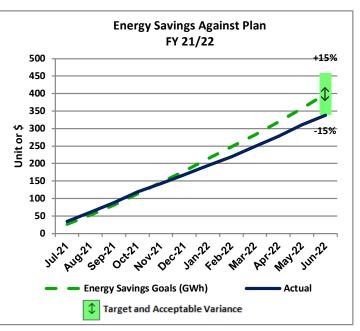
SOURCE OF DATA: Efficiency Solutions KPI FY 20-21 Report

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 338 GWh energy savings this FY 21-22, or 15% below the target despite COVID-19. Major contributors to the FY 21-22 total energy savings are the Commercial Lighting Incentive Program, Commercial Direct Install, Custom Performance Program, Consumer Rebate Program, HVAC



Optimization and LAUSD Direct Install energy efficiency programs.

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

Energy efficiency program activities will increase in FY 22-23 with Home Energy Improvement Program (HEIP) and the **Comprehensive Affordable Multi-Family** Retrofits (CAMR) Program expected to move forward.

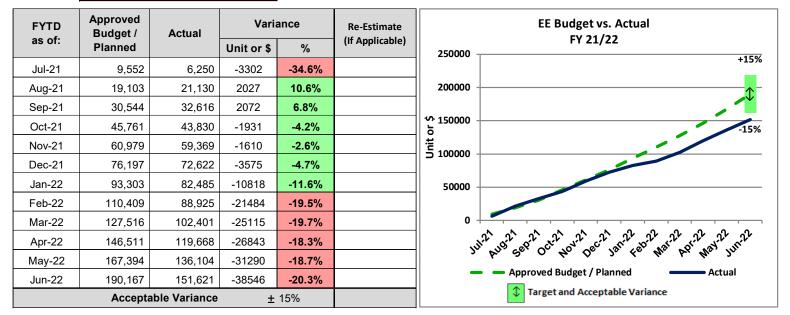
4. MITIGATION PLAN AND / OR **RECOMMENDATIONS**

Utility Services Specialist positions have been filled and support for all energy efficiency programs are in place to accelerate programs.

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

DEFINITION OF RATES METRIC: Budget vs. Actual for the overall Energy Efficiency Portfolio TARGET & ACCEPTABLE VARIANCE (FY 21/22): +/- 15%

STATUS: **Outside Acceptable Variance**



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 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 (CAMR) Program that

was just launched. Programs that continue to move forward are the Consumer Rebate Program, Commercial Lighting Incentive Program, and LAUSD Direct Install energy efficiency programs.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

Energy efficiency program activities and expenditures are expected to increase in FY 22-23.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

Energy Efficiency programs/activities will continue to ramp up and expenditures will continue to increase in FY 22-23. Utility Services Specialist positions have been filled and support for all energy efficiency programs are in place to accelerate programs.

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

RESPONSIBLE MANAGER: David Jacot

REPORTING PERIOD: June 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. <u>PERFORMANCE / VARIANCE ANALYSIS</u> <u>& YEAR END PROJECTION</u>

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

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