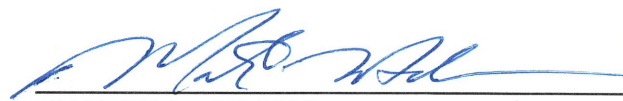




INFORMATIONAL BOARD LETTER


ANN M. SANTILLI
Chief Financial Officer


MARTIN L. ADAMS
General Manager and Chief Engineer

DATE: August 4, 2020

SUBJECT: LADWP Rates and Equity Metrics Semi-Annual Report

SUMMARY

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

Pursuant to Section 4 of the Water and Electric Rates Ordinances, LADWP shall provide a written report to the Board of Water and Power Commissioners (Board) on a semi-annual basis, commencing 2017. This report shall include:

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

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

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

Recent Equity Metrics Developments

The Department is in the process of appointing a Racial Equity Director. The format and the content of Equity Metrics Initiative Reporting maybe revised going forward.

RATES METRICS

Rates Metrics FY 2019-2020 (Fiscal-Year-To-Date April 2020)

The Rates Metrics currently include 20 for Water System, 28 for Power System, and 9 for Joint System. A summary of the fiscal-year-to-date April 2020 performance status of all these metrics is listed in the LADWP Rates Metrics Summary (Attachment I).

LADWP Rates Metrics Status (Fiscal Year to Date April 2020)		
Performance Status		# Metrics
Exceeds Target	Blue	7
Within Acceptable Variance	Green	27
Outside Acceptable Variance	Red	13
Needs Attention	Yellow	1
Information Only	White	9
Total		57

For the period ending April 2020, 60 percent of the metrics are either within the acceptable variance or exceed the target.

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

Power System

Metric	Variance	Explanation
Power System Reliability Program (PSRP) Generation Capital (Budget vs. Actual)	-70.8% (\$-19.2M)	<ul style="list-style-type: none"> The San Fernando Power Plant Project and emergency repairs have been deferred to next fiscal year. The Castaic Power Plant overhaul project is on hold while the cranes are expected to be re-certified for safe operation in May 2020.
PSRP Transmission Capital (Budget vs. Actual)	43.1% (\$27M)	<ul style="list-style-type: none"> A significant amount of contract invoices were processed in January 2020 causing an uptick in spending. Remaining oil-filled 138kV circuits are being replaced with 230kV cable causing an increase in expenditures.
PSRP Transmission O&M (Budget vs. Actual)	29.6% (\$7.9M)	<ul style="list-style-type: none"> The jobs in PSRP Transmission O&M were under budgeted. The budget for the jobs has been adjusted for next fiscal year.
Cost per Circuit Mile for Underground Circuit	101.8% (\$5.6M/Mile)	<ul style="list-style-type: none"> A significant amount of contract invoices were processed in January 2020 which increased the year-to-date trending cost significantly Actual cost per circuit mile vary significantly each year depending on the circuits to be replaced and the need to use the contingency provisions of the contract.

Metric	Variance	Explanation
Average Unit Cost per Pole	50.8% (\$12.2K)	<ul style="list-style-type: none"> Power Transmission and Distribution is working with the Work Management Information System (WMIS) administrators to refine how pole replacement costs are captured and continues to affect the cost per unit. The number of crews, the number of employees on each crew, and how time is entered into WMIS by each employee affects WMIS reporting, which consequently affects the cost per unit average. The cost of the pole replacement is also affected by the complexity/ease of replacement as well as the location and other mitigating factors such as the introduction of alternative poles.

Water System

Metric	Variance	Explanation
New Distribution Infrastructure Crews (Number of new distribution infrastructure crews as compared to plan)	-100% (0)	<ul style="list-style-type: none"> The division is continuously hiring; however, due to internal transfers, promotions, and attrition, the new positions being filled are performing work in existing critical infrastructure crews instead of staffing new ones. Additionally due to COVID-19, the Department was in a temporary hiring freeze beginning mid-March.
Water Supply Costs Capital (Budget vs. Actual)	-50.7% (\$-37.6M)	<ul style="list-style-type: none"> Several water recycling projects were canceled or deferred due to changes in scope of work and lack of design resources. Capital work on the Los Angeles Aqueduct was delayed due to the larger than expected runoff during the first half of the fiscal year. During the second half of the fiscal year, COVID-19 severely hampered efforts to complete capital projects where crews work closely together. The demand for residential and commercial Water Conservation rebates has decreased.
Recycled Water Delivered	-25.1% (-2.5K)	<ul style="list-style-type: none"> Water delivery in the Harbor area was affected by construction on the recycled water pipe. Water delivery to Dominguez Gap barrier was interrupted for 6 weeks so that the Machado Lake Pipeline Project construction crews could connect into the existing Harbor pipeline. COVID-19 closures and limited access to recycled water facilities affected recycled water usage in March and April.
Aqueduct Refurbishment Capital (Budget vs. Actual)	-46.9% (\$-11.3M)	<ul style="list-style-type: none"> The Grant Lake Spillway project and the 2nd Los Angeles Aqueduct and State Water Project Intertie budget were deferred.

		<ul style="list-style-type: none"> COVID-19 has severely hampered efforts to complete capital projects where crews work closely together.
Aqueduct Refurbishment O&M (Budget vs. Actual)	23.9% (\$9.2K)	<ul style="list-style-type: none"> Due to COVID-19, a large amount of work was shifted from Capital to O&M. Employees performed additional O&M work which allows for distancing (such as cleaning canals and ditches) instead of the originally planned capital work.
Pump Stations Capital (Budget vs. Actual)	-51.3% (\$-7.2M)	<ul style="list-style-type: none"> The Redmont Pump Station schedule has been delayed due to redesigning of the motors. Expenditures on Victory Pump Station have been less than budgeted because of delays due to newly identified needs to have a full geotechnical investigation and to acquire property prior to design completion.
Mainline Replacement (Feet of mainline replaced against plan)	-29.4% (-55,213 Feet)	<ul style="list-style-type: none"> The Division does not anticipate reaching the FY 19/20 goal. Due to the COVID-19 pandemic, field work was reduced to enable physical distancing. Mainline crews were assigned to perform service installations and leak repairs to limit prolonged noise and exposure to residents with school-aged children

Joint System

Metric	Variance	Explanation
Financial and Human Resources Replacement Project (Budget vs. Actual)	-73.2% (\$-17.5M)	<ul style="list-style-type: none"> Progress was temporarily delayed while the LADWP reprioritizes critical projects and hires needed resources. ERP labor expenditures are below approved budget as hiring of additional project positions is frozen.

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

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

Rates Metrics Reporting Dashboards

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

mitigation plans and/or recommendations to improve performance as necessary. The performance status of each Rate Metrics is reflected through the following colors:

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

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

EQUITY METRICS

Background and Purpose

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

In addition to the metrics captured in the EMDI, many of the projects and programs at the LADWP contribute to equity for stakeholders. Corporate Performance Group identifies and reports on these efforts as well.

Goals, Progress, and Explanations

During the March 10, 2020 Board Meeting, the Board requested additional data for goals and progress toward the goals for programs reported under the EMDI. Corporate Performance worked with EMDI program managers to establish and report the following goals and progress toward the goals:

Equity Core Category – Water and Power Infrastructure Improvement		
Metric	Goals	Progress and Explanation
1. Water Quality Complaints	Respond to inquiries by end of next business day 95% of the time or better	<ul style="list-style-type: none"> • Continues to meet this goal • Transactional survey data rates service as “excellent”
2. Water System Probability of Failure &	174,000 feet of mainline pipe	<ul style="list-style-type: none"> • As of April 2020, the mainline pipe replacement is 60% completed

Planned Replacement	replacement for FY 20/21	<ul style="list-style-type: none"> Efforts have been curtailed due to COVID-19 pandemic, civil unrest, staffing, increased regulations
3. System Average Interruption Duration Index (SAIDI) & System Average Interruption Frequency Index (SAIFI)	SAIFI Target 0.76 SAIDI Target 95	<ul style="list-style-type: none"> LADWP's 5-Year Average SAIFI (excluding major event days) was ranked 1st quartile at 0.75 from 2014 – 2018 compared to other IOUs March SAIFI is 0.72 and SAIDI at 114.58 minutes SAIDI is higher than normal due to severe weather events of Apr and Dec of 2019
4. Power System Reliability Program – Pole, Transformer, Cable Replacements	FY20/21 – 3,500 Poles, 850 Transformers, and 50 miles of Cable replacement	<ul style="list-style-type: none"> -0.6% variance for Pole replacement but within 15% threshold target -9.2% variance for Transformer replacement but within 15% threshold target 20.0% variance above target for Cable replacement due to district crews closing completed jobs in the system

Equity Core Category – Customer Incentive Programs and Services

Metric	Goals	Progress and Explanation
5. Rain Barrel/Cistern/ Water Tank Rebates	Meet requirements of the Green New Deal	<ul style="list-style-type: none"> Part of the Green New Deal sustainability plan that calls for sourcing 70% water locally, capture 150k acre ft/yr of stormwater and reduce per capita potable water use by 25% by 2035 Processed 141 rain barrel and 4 cistern rebates
6. Turf Removal Rebates	Meet requirements of the Green New Deal	<ul style="list-style-type: none"> Part of the Green New Deal sustainability plan that calls for sourcing 70% water locally, capture 150k acre ft/yr of stormwater and reduce per capita potable water use by 25% by 2035 496,566 sq ft of turf removed – residential customer 13,914 sq ft of turf removed – commercial customer
7. City Plants	42,000 Trees to be distributed and planted from 2019-2021	<ul style="list-style-type: none"> 12,000 Trees have been planted and distributed through April Program retooling to accommodate the social distancing and safety precautions

Metric	Goals	Progress and Explanation
8. Commercial Direct Install Program	For FY 20/21 on average installation goal of 423 businesses per month	<ul style="list-style-type: none"> 3,106 businesses completed from November 2019 through April 2020 Program affected by COVID-19 pandemic. Recruiting contractors to continue the program with safety precautions
9. Home Energy Improvement Program	For FY 20/21 on average 362 Multi Residential units and 136 Single Family homes	<ul style="list-style-type: none"> 792 installations completed at Multi Residential units from November 2019 through April 2020 Program temporarily suspended due to COVID-19 pandemic
10. Refrigerator Exchange Program	For FY 20/21 exchange 5,250 refrigerator units	<ul style="list-style-type: none"> 1,684 refrigerators exchanged from November 2019 through April 2020 134,443 refrigerators were exchanged since inception of the program Program temporarily suspended due to COVID-19 pandemic
11. Consumer Rebate Program	For FY 20/21 on average process 11,000 rebates every 6 months	<ul style="list-style-type: none"> For FY 19/20 program exceeded projected participation, budget, and energy savings goals 10,488 rebates processed from Nov 2019 through Apr 2020 Rebate payments on-track despite COVID-19 pandemic
12. Electric Vehicle Infrastructure	10,000 commercial chargers by 2022	<ul style="list-style-type: none"> 4,111 chargers installed throughout the city Sites located in CalEnviroScreen designated as disadvantaged communities are given greater priority
13. Low Income & Lifeline Programs	Increase customer enrollment in Low Income Program by 10%	<ul style="list-style-type: none"> 1192,986 participants enrolled in Low Income Program as of April 2020 92,692 participants enrolled in Lifeline Program as of April 2020 Increase outreach through governmental agencies and use newer technology for faster application submission and approval

Equity Core Category – Procurement		
Metric	Goals	Progress and Explanation
14. Procurement	25% SBE and 3% DVBE participation for service contracts over \$150k	<ul style="list-style-type: none"> Annual contract participation commitment: SBE – 27.1%, MBE – 8.9%, WBE – 1.5%, DVBE – 0.1% Procurement system does not capture certification status of vendors or subcontractors; therefore, reporting is done manually

Since the establishment of the EMDI, the LADWP has made significant efforts toward achieving equitable outcomes. For the period October 2019 to April 2020, the following are examples of managers incorporating equity considerations into their policy decision making and outreach:

- LADWP has been offering income qualified residential customers with a Low-Income Discount rate since 1991. The total annual subsidy can range from \$158 to \$218 per household. As of October 2019, there are approximately 119,378 participants enrolled in this program. The goal is to increase customer enrollment in the program by 10 percent. The program managers will be working with other governmental agencies to increase outreach and work on adopting newer technology for faster application submission and approval.
- The LADWP’s Community Solar Program is designed to improve solar equity for people who missed the opportunity to participated in the LADWP’s previous solar programs. In order to ensure equitable outcome, the program targets zip codes with low solar penetration from previous programs. The Solar Rooftop Program has a goal to install two photo voltaic systems per month and the Shared Solar Program is looking to enroll 400 customers each calendar year.
- The Electric Vehicle (EV) Program budget was increased significantly to facilitate the goal of installing 10,000 chargers by 2022 in areas throughout the city where gaps in EV Charging infrastructure were identified. Four thousands of these chargers will be on City property. There have been 4,111 EV Charging Stations installed so far.
- Supply Chain Services exceed the Small Business Enterprise (SBE) participation commitment goal. They created and conducted “How to Do Business with LADWP” workshops for Small Business in the LA Metro and Valley regions. The group hosted three new vendor introduction meetings and participated ten in-person outreach events and one virtual outreach event. Despite social distancing restrictions, LADWP will continue to reach out to small and diverse businesses through virtual platforms.

Equity Stakeholder Outreach

Corporate Performance Group continuously engages with stakeholders from the community in order to receive feedback and improve the equity metrics program. Los Angeles Alliance for a New Economy and RePower LA coalition has been working closely with the Corporate Performance Group to understand the Department's Low-Income Program. They are willing to lend their support and work with the disadvantages communities in order to help increase the number of Low Income Program participants.

Equity Research and Studies

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

- Continue to work with Loyola Marymount University to participate in and receive data from the upcoming annual Los Angeles Public Opinion Survey conducted by their Thomas and Dorothy Leavey Center for the Study of Los Angeles (StudyLA). StudyLA develops and conducts innovative research in leadership studies, quality-of-life, and contemporary urban issues in the Los Angeles region. Each year StudyLA conducts the region's largest general social survey (Los Angeles Public Opinion Survey) on the residents of Los Angeles County to gauge their outlook for the year.
- Initiated task order with Loyola Marymount University to enhance spatial analysis of customer incentive programs and services, power reliability and water quality by integrating additional census and public opinion data into the EMDI. This work will be done under the Memorandum of Agreement between LADWP and the University of California, Los Angeles.

Equity Metrics Reporting Dashboards

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

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

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

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

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

ATTACHMENTS

- LADWP Rates Metrics Summary 2019-2020 Fiscal Year to Date (April 2020) (Attachment I)
- Equity Metrics Dashboards (Attachment II)

ATTACHMENT I
LADWP Rates Metrics Summary
2019-2020 Fiscal Year To Date
(April 2020)

LADWP RATES METRICS SUMMARY

Related Rate Adjustment Factor	Category	#	Board Metric	Definition	FY 19/20 Target	Acceptable Variance	Responsible Manager	April 2020 Performance
Power (None)	Repowering/Once Through Cooling	1	Repowering/Once Through Cooling budget vs. actual (\$M)	Board Approved Estimated Project Cost vs. Actual project costs	FY19/20 Board Approved Budget - May 2019	Info only	Marcelo Di Paolo Silvia Lozano	NA
	Repowering/Once Through Cooling	2	Once Through Cooling project milestones against compliance deadlines	Plant actual compliance dates against plan	OTC Compliance Date: Scattergood Unit 1&2: 2024 Haynes Unit 1&2: 2029 Harbor Unit 1&2: 2029 Haynes Unit 8: 2029	Info only	Marcelo Di Paolo Silvia Lozano	NA
Reliability Cost Adjustment Factor	Power System Training Plan	3	Average cost of Power System Training Plan per trainee	Average cost of training for Electric Distribution Mechanic Technician (EDMT) classification per trainee that graduates from respective training program	EDMT: \$521.5K	+/- 15%	Nazir Fazli	-30.4%
	Power System Training Plan	4	Average cost of Power System Training Plan per trainee	Average cost of training for Electrical Mechanic Technician (EMT) classification per trainee that graduates from respective training program	EMT: \$529.1K	+/- 15%	Nazir Fazli	-60.2%
	Power System Training Plan	5	Number of trainee graduates against Power System Training Plan	Number of Electric Distribution Mechanic Technician (EDMT) trainees that graduate from each respective training program against the annual training plan	EDMT: 17	+/- 15%	Nazir Fazli	-5.9%
	Power System Training Plan	6	Number of trainee graduates against Power System Training Plan	Number of Electrical Mechanic Technician (EMT) trainees that graduate from each respective training program against the annual training plan	EMT: 0	+/- 15%	Nazir Fazli	0.0%
Energy Cost Adjustment Factor	Renewable Portfolio Standard (Owned)	7	Total Renewable Portfolio Standard (RPS) Ratio (%)	GWh from RPS plants/GWh for all customers (State requirement)	31% RPS for Calendar Year 2019	+/- 3% of each calendar year's goal toward state law mandates	John Giese	3.4%
	Renewable Portfolio Standard (Owned)	8	Total RPS cost (\$/MWh) vs. plan, by technology (Wind)	Total RPS purchased power cost (\$/MWh) as compared to plan, by technology (Wind)	Wind: \$83.85/MWh	+/- 15%	Jan Lukjaniec	9.2%
	Renewable Portfolio Standard (Owned)	9	Total RPS cost (\$/MWh) vs. plan, by technology (Solar)	Total RPS purchased power cost (\$/MWh) as compared to plan, by technology (Solar)	Solar: \$71.43/MWh	+/- 15%	Jan Lukjaniec	-11.9%
	Renewable Portfolio Standard (Owned)	10	Total RPS cost (\$/MWh) vs. plan, by technology (Geothermal)	Total RPS purchased power cost (\$/MWh) as compared to plan, by technology (Geothermal)	Geothermal: \$80.86/MWh	+/- 15%	Jan Lukjaniec	-3.3%

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

Related Rate Adjustment Factor	Category	#	Board Metric	Definition	FY 19/20 Target	Acceptable Variance	Responsible Manager	April 2020 Performance
	Renewable Portfolio Standard (Owned)	11	Total RPS cost (\$/MWh) vs. plan, by technology (Biogas)	Total RPS purchased power cost (\$/MWh) as compared to plan, by technology (Biogas)	Biogas: \$0.00/MWh	Info only	Jan Lukjaniec	NA
Energy Cost Adjustment Factor	Renewable Portfolio Standard (Purchased)	12	Average levelized cost of energy of purchased power agreements (PPAs) signed during the previous fiscal year	Cost per MWh for all PPAs	\$0.00/MWh (No contracts were executed in FY18/19)	+/- 15%	Jan Lukjaniec	0.0%
Reliability Cost Adjustment Factor	Power System Reliability Program (Generation)	13	Budget vs. actual (\$M) for capital in the Generation budget	Board Approved Annual Budget vs. Actual expenditures	FY19/20 Board Approved Budget - May 2019	+/- 15%	Robert Fick	-70.8%
	Power System Reliability Program (Transmission)	14	Budget vs. actual (\$M) for capital included in the Transmission budget	Board Approved Annual Budget vs. Actual expenditures	FY19/20 Board Approved Budget - May 2019	+/- 15%	John Hormozi	43.1%
		15	Budget vs. actual (\$M) for O&M expenses included in the Transmission budget	Board Approved Annual Budget vs. Actual expenditures	FY19/20 Board Approved Budget - May 2019	+/- 15%	Ruben Hauser	29.6%
	Power System Reliability Program (Transmission)	16	Cost per mile of underground circuits	Cost per mile of underground circuits	\$5.5 million	+/- 15%	Kishan Kasondra	101.8%
	Power System Reliability Program (Substation)	17	Budget vs. actual (\$M) for capital in the Substation budget	Board Approved Annual Budget vs. Actual expenditures	FY19/20 Board Approved Budget - May 2019	+/- 15%	Sharat Batra	-1.3%
		18	Budget vs. actual (\$M) for O&M expenses in the Substation budget	Board Approved Annual Budget vs. Actual expenditures	FY19/20 Board Approved Budget - May 2019	+/- 15%	Marciano Navar	-0.7%
	Power System Reliability Program (Distribution)	19	Budget vs. actual (\$M) for capital in the Distribution budget	Board Approved Annual Budget vs. Actual expenditures	FY19/20 Board Approved Budget - May 2019	+/- 15%	Sager Farraj	2.8%
		20	Budget vs. actual (\$M) for O&M expenses in the Distribution budget	Board Approved Annual Budget vs. Actual expenditures	FY19/20 Board Approved Budget - May 2019	+/- 15%	Arthur Johnson	2.4%
	Power System Reliability Program (Distribution)	21	Number of fixed assets replaced against plan for critical Distribution assets (Transformers)	Numbers of transformers replaced against plan	Transformer: 850	+/- 15%	Arthur Johnson	-9.2%
		22	Number of fixed assets replaced against plan for critical Distribution assets (Poles)	Numbers of poles replaced against plan	Pole: 4,000	+/- 15%	Arthur Johnson	-0.6%
		23	Number of fixed assets replaced against plan for critical Distribution assets (Crossarms)	Numbers of crossarms replaced against plan	Cross-arm: 10,000	+/- 15%	Arthur Johnson	8.6%
		24	Number of fixed assets replaced against plan for critical Distribution assets (Cable)	Numbers of miles of cable replaced against plan	Cable: 50 miles	+/- 15%	Sager Farraj	20.1%

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

Related Rate Adjustment Factor	Category	#	Board Metric	Definition	FY 19/20 Target	Acceptable Variance	Responsible Manager	April 2020 Performance
	Power System Reliability Program (Distribution)	25	Average unit price for critical Distribution assets (Transformers)	Average unit price per transformer	Transformer: \$9k	+/- 15%	Walter Rodriguez	13.3%
		26	Average unit price for critical Distribution assets (Poles)	Average unit price per pole	Pole: \$24k	+/- 15%	Walter Rodriguez	50.8%
		27	Average unit price for critical Distribution assets (Cross-arms)	Average unit price per cross-arm	Cross-arm: \$2k	+/- 15%	Walter Rodriguez	-20.0%
		28	Average unit price for critical Distribution assets (Cable)	Average unit price per mile of cable	Cable: \$1,100k	+/- 15%	Walter Rodriguez	14.2%
Water (None)	Water System Staffing Program	29	Number of new distribution infrastructure crews as compared to plan	Number of new crews dedicated to distribution infrastructure as compared to plan	2 crews (15 employees)	+/- 15%	Breonia Lindsey/Sandy Foster	-100.0%
Water Supply Cost Adjustment Factor	Water Supply	30	Water supply costs budget vs. actual (\$M) for capital	Board Approved Annual Budget vs. Actual expenditures	FY19/20 Board Approved Budget - May 2019	+/- 10%	April Thang	-50.7%
	Water Supply	31	Water supply costs budget vs. actual (\$M) for O&M	Board Approved Annual Budget vs. Actual expenditures	FY19/20 Board Approved Budget - May 2019	+/- 10%	April Thang	-8.7%
	Water Supply	32	Annual quantity of purchased water in acre-feet (AF) against plan	AF of water purchased against plan	No Target	Info only	April Thang	NA
	Water Supply	33	Annual quantity of recycled water delivered against plan (AF)	AF of recycled water delivered against plan	11,000 AF	+/- 10%	Gregory Reed	-25.1%
	Water Supply	34	Stormwater system capacity milestones (AF) against plan	AF of stormwater system capacity as of a milestone date against plan	73,000 AF	+/- 10%	David Pettijohn	1.8%
	Water Supply	35	Annual groundwater production in Central Basin (AF) against plan	AF of Groundwater in Central Basin against plan	No Target	Info only	Evelyn Cortez-Davis	NA
	Water Supply	36	Annual groundwater production in San Fernando Basin (AF) against plan	AF of Groundwater in San Fernando Basin against plan	No Target	Info only	Evelyn Cortez-Davis	NA
	Capital Improvement Program	37	Budget vs. actual (\$M) for Aqueduct refurbishment capital	Board Approved Annual Budget vs. Actual expenditures	FY19/20 Board Approved Budget - May 2019	+/- 10%	Darin Willey	-46.9%
	Capital Improvement Program	38	Budget vs. actual (\$M) for Aqueduct refurbishment O&M	Board Approved Annual Budget vs. Actual expenditures	FY19/20 Board Approved Budget - May 2019	+/- 10%	Darin Willey	23.9%
	Water Supply	39	Level of water conservation against target (GPCD)	Gallons per capita per day (GPCD) of water conserved against target	106 Gallons	+/- 10%	Terrence McCarthy	-2.8%

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

Related Rate Adjustment Factor	Category	#	Board Metric	Definition	FY 19/20 Target	Acceptable Variance	Responsible Manager	April 2020 Performance
Water Infrastructure Adjustment Factor	Capital Improvement Program	40	Budget vs. actual (\$M) for fixed assets replacement	Board Approved Annual Budget vs. Actual expenditures	FY19/20 Board Approved Budget - May 2019	+/- 10%	April Thang	-14.1%
	Capital Improvement Program	41	Budget vs. actual (\$M) for Pump Stations	Board Approved Annual Budget vs. Actual expenditures	FY19/20 Board Approved Budget - May 2019	+/- 10%	Gregory Reed	-51.3%
	Capital Improvement Program	42	Budget vs. actual (\$M) for Regulator/Relief Station Retrofits	Board Approved Annual Budget vs. Actual expenditures	FY19/20 Board Approved Budget - May 2019	+/- 10%	Gregory Reed	26.2%
	Capital Improvement Program	43	Assets replaced against plan	Feet of mainline replaced against plan	Mainline: 232,000 Feet	+/- 10%	Mainline & Meters: Breonia Lindsey/Sandy Foster	-29.4%
	Capital Improvement Program	44	Assets replaced against plan	Feet of trunkline replaced against plan	Trunkline: 6,000 Feet	+/- 10%	Trunkline: Gregory Reed	58.4%
	Capital Improvement Program	45	Assets replaced against plan	Number of meters replaced against plan	Meters: 33,500	+/- 10%	Mainline & Meters: Breonia Lindsey/Sandy Foster	-9.1%
Water Quality Improvement Adjustment Factor	Water Quality Projects	46	Total Water Quality Budget vs. actual (\$M) for capital	Board Approved Annual Budget vs. Actual expenditures	FY19/20 Board Approved Budget - May 2019	+/- 10%	Gregory Reed	-4.6%
Water Quality Improvement Adjustment Factor	Water Quality Projects	47	Total Water Quality Budget vs. actual (\$M) for O&M	Board Approved Annual Budget vs. Actual expenditures	FY19/20 Board Approved Budget - May 2019	+/- 10%	Evelyn Cortez-Davis	1.2%
Owens Valley Regulatory Adjustment Factor	Owens Valley	48	Budget vs. actual for Owens Lake O&M (\$M)	Board Approved Annual Budget vs. Actual expenditures	No Target	Info only	Gregory Loveland	NA
	Human Resources	49	Human Resources Total FTEs against plan	Total number of full time equivalent positions occupied vs. annual Authorized Personnel Resolution	FY19/20 Board Approved Annual Authorized Personnel Resolution - May 2019	+/- 10%	Shannon Pascual	-5.3%
	Financial and Human Resources Replacement Project	50	Financial and Human Resources Replacement Project total spending against plan	Board Approved Annual Budget vs. Actual expenditures	FY19/20 Board Approved Budget - May 2019	+/- 20%	Flora Chang	-73.2%

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

Related Rate Adjustment Factor	Category	#	Board Metric	Definition	FY 19/20 Target	Acceptable Variance	Responsible Manager	April 2020 Performance
Joint (None)	Financial and Human Resources Replacement Project	51	Financial and Human Resources Replacement Project progress against schedule	Project milestones met against project schedule	Target Suspended	Info only	Flora Chang	NA
	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	FY19/20 Board Approved Budget - May 2019	+/- 15%	LADWP Senior Management	-7.4%
	LADWP Employees per Customer Meter	53	Total Number of Water and Power Employees per Customer Meter	Total number of water and power employees (excluding daily exempt and Utility Pre-Craft Trainees) per water and power meters	No Target	Info only	Corporate Performance	NA
Energy Cost Adjustment Factor	Renewable Portfolio Standard (Owned)	54	Green House Gas (GHG) emissions reduction ratio	GHG emission for current year/GHG emission in 1990 (in millions of metric tons)	Calendar Year 2018: 50% Calendar Year 2019: 47%	+/- 5%	Mark Sedlacek	51.0%
Energy Cost Adjustment Factor	Energy Efficiency	55	Energy Efficiency (EE) ratio (%)	GWh installed compared to the 2010 baseline/GWh for all customers	1.60%	+/- 15%	David Jacot	5.8%
	Energy Efficiency	56	Budget vs. actual (\$M) for the overall EE portfolio	Board Approved Annual Budget vs. Actual expenditures	FY19/20 Board Approved Budget - May 2019	+/- 15%	David Jacot	-3.0%
	Energy Efficiency	57	Levelized EE program costs (\$/kWh)	Cost per kWh over lifetime of installed energy efficiency solutions	Annual metric: Levelized Cost \$0.08/kWh	+/- 15%	David Jacot	

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

Power System

LADWP RATES METRIC – *Once Through Cooling, Capital (Power)*

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

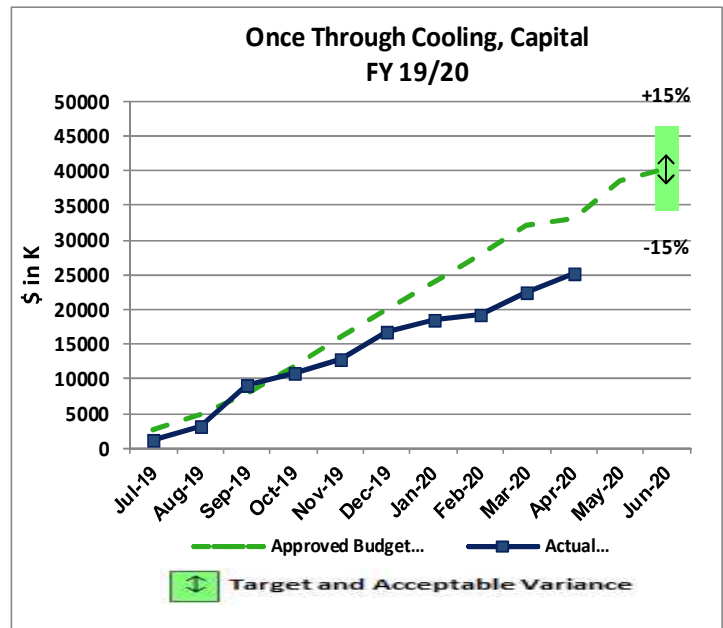
REPORTING PERIOD: April 2020

DEFINITION OF RATES METRIC: Board Approved FY 19/20 Budget vs. Actual Expenditures For Once Through Cooling/Repowering, Capital
TARGET & ACCEPTABLE VARIANCE (FY 19/20): Target = \$40,237K; Acceptable Variance = N/A

STATUS: INFORMATION ONLY

FYTD as of:	Approved Budget (\$ in K)	Actual (\$ in K)	Variance		Re-Estimate
			\$ in K	%	
Jul-19	2,805.0	1,317.0	-1,488.0	-53.0%	
Aug-19	4,988.9	3,309.9	(1,679.0)	-33.7%	
Sep-19	7,963.3	9,192.0	1,228.7	15.4%	
Oct-19	11,972.8	10,748.0	(1,224.8)	-10.2%	
Nov-19	15,982.3	12,857.0	(3,125.3)	-19.6%	
Dec-19	19,991.8	16,919.0	(3,072.8)	-15.4%	
Jan-20	24,001.3	18,436.0	(5,565.3)	-23.2%	
Feb-20	28,010.8	19,371.0	(8,639.8)	-30.8%	
Mar-20	32,020.3	22,514.0	(9,506.3)	-29.7%	
Apr-20	33,159.7	25,132.0	(8,027.7)	-24.2%	
May-20	38,533.8				31,645.0
Jun-20	40,237.3				37,825.0
Acceptable Variance			± 15%		-6.0%
SGS Repowering Phase I Project Total*			\$1,067M		12/31/2016
SGS Repowering Phase II Project Total*			\$660M		12/31/2021
Haynes Repowering Project Total			\$701M		6/30/2025
OTC Projects Total			\$2,428M		6/30/2025

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



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

Total Project Approved From Inception to FY27/28	\$2,028.0 M
Projects Approved to Date	\$1,221.3
Project Actuals to Date	\$1,062.3
Total OTC Program Variance	-13.0%

1. BACKGROUND / PURPOSE

- This is a summary of expenditures for capital projects per the State Water Resources Control Board’s 2010 Statewide Once-Through Cooling (OTC) Policy to eliminate ocean water cooling.
- The purpose of this rate metric has changed to INFORMATION ONLY as the OTC natural gas operations are phasing out due to the Mayor’s announcement in February 2019.
- Haynes (HnGS) Units 3 - 6 Demolition - For the fiscal year, the major project goals include the completion of waste clearance, asbestos abatement, and the maintenance building installation and relocation.

2. ACHIEVEMENTS / MILESTONES MET

- HnGS Units 3 - 6 Demolition –The Demolition contractor TRC Solutions Inc. (TRC) Subcontractor Silverado completed demolition of Tank D, the Cutter Stock tank, and Units 5 and 6 turbine deck concrete. (April 2020)
- HnGS Units 3 - 6 Demolition – Subcontractor Ecobay completed asbestos abatement on Unit 6. (April 2020)
- HnGS Units 3 - 6 Demolition – Subcontractor Bremco completed structural steel erection for the new maintenance building. (April 2020)

- HnGS Units 3 - 6 Demolition –TRC began erecting structural steel for the new maintenance building. (March 2020)
- HnGS Units 3 - 6 Demolition – Subcontractor Silverado completed demolition of Tank E and Units 5 and 6 turbine deck structural steel. (March 2020)
- HnGS Units 3 - 6 Demolition – Subcontractor Patriot Environmental completed cleaning the interior of Tank D and the associated fuel oil lines. (March 2020)
- HnGS Units 3 - 6 Demolition – TRC completed pouring the concrete slab for the new maintenance building. (February 2020)
- HnGS Units 3 - 6 Demolition – Subcontractor Silverado completed removal of Unit 6 turbine and generator rotors, and began demolition of Tank E. (February 2020)
- HnGS Units 3 - 6 Demolition – Subcontractor Patriot Environmental completed transporting Tank D water off site for disposal. (February 2020)
- HnGS Units 3 - 6 Demolition – Subcontractor Integrated Demolition and Remediation (IDR) completed asbestos abatement of fuel oil lines at Tanks D and E. (February 2020)

- HnGS Units 3 - 6 Demolition - Subcontractor Silverado completed demolition of the Unit 3 Generator Step Up (GSU). (January 2020)
- HnGS Units 3 - 6 Demolition – Subcontractor Patriot Environmental completed cleaning the Cutter Stock Tank and began transporting Tank D water off site for disposal. (January 2020)
- HnGS Units 3 - 6 Demolition – Subcontractor IDR began asbestos abatement of fuel oil lines at Tank D. (January 2020)
- HnGS Units 3 - 6 Demolition –Subcontractor Silverado completed demolition of the Unit 6 GSU transformer and began disassembly and demolition of Units 5 and 6 turbine-generators. (December 2019)
- HnGS Units 3 - 6 Demolition - Subcontractor B&D Construction completed the second and final concrete pour for the temporary maintenance building foundation grade beams, footings and pedestals. (December 2019)
- HnGS Units 3 - 6 Demolition – Subcontractor IDR completed transite panel removal at Tanks D and E. (December 2019)
- HnGS Units 3 - 6 Demolition - TRC completed asbestos abatement on Units 5 & 6 turbine generators and the first pour on the maintenance building foundation grade beam, footings, and pedestals. (November 2019)
- HnGS Units 3 - 6 Demolition - TRC also finished scaffolding for Unit 6 abatement work. (November 2019)
- HnGS Units 3 - 6 Demolition - Subcontractor IDR completed mobilization. (November 2019)
- HnGS Units 3 - 6 Demolition - TRC completed Units 3&4 construction elevator installation and certification. (October 2019)
- HnGS Units 3 - 6 Demolition - TRC completed final grading and began foundation of the maintenance building construction. (October 2019)
- HnGS Units 3 - 6 Demolition - TRC completed Units 5&6 construction elevator installation and certification. Units 5&6 turbine and generator asbestos abatement and Unit 6 boiler abatement scaffolding and containment began. In addition, TRC completed general universal waste removal for Units 3-6. (September 2019)
- HnGS Units 3 - 6 Demolition - TRC began civil grading at the temporary maintenance building site and completed installation of construction elevators at Units 5 and 6. LADWP construction trailers were also delivered on site for assembly. (August 2019)
- HnGS Units 3 - 6 Demolition - TRC is fully mobilized on site and is in preparation for hazardous material abatement, universal waste clearance, and the maintenance building installation. (July 2019)

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- Variance in actual expenditure is due to:
 - Delayed demo project invoice payments being caught up at Haynes GS, resolution of remaining General Electric and

Kiewit punch list items, and plant personnel rework on various systems related to the Scattergood (SGS) repowering.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

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

Within Acceptable Variance  Outside Acceptable Variance  Exceeds Target  Needs Attention 

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

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

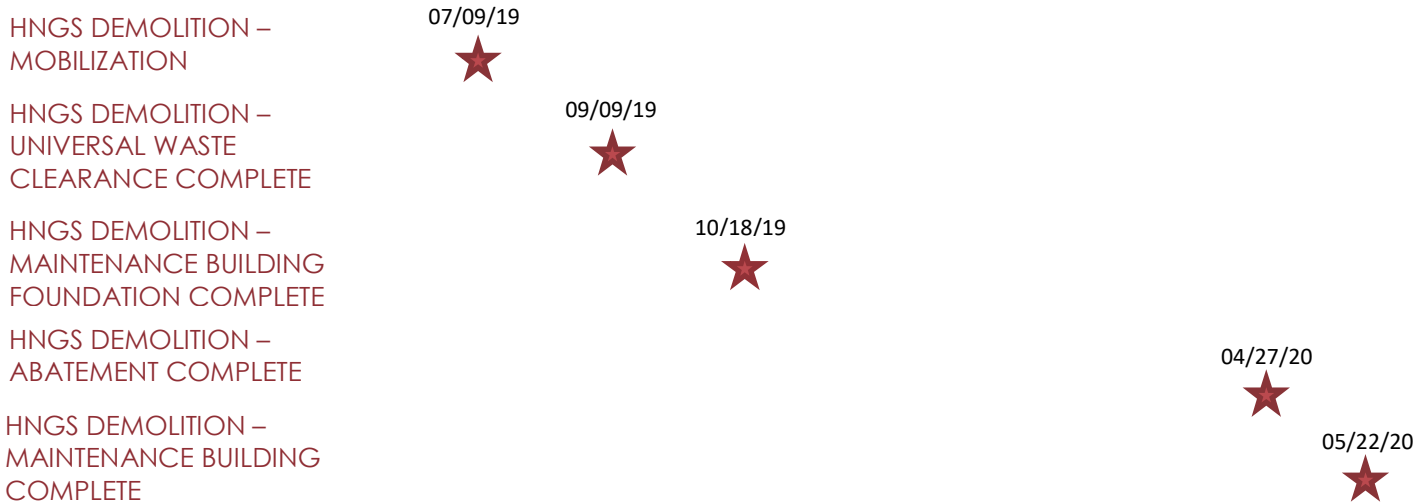
REPORTING PERIOD: April 2020

DEFINITION OF RATES METRIC: Repowering Project/ Once Through Cooling Project Milestones vs. Compliance Deadlines

TARGET & ACCEPTABLE VARIANCE (FY 19/20): Target = Compliance deadlines and plants in-service dates against plans; Acceptable Variance: N/A

STATUS

INFORMATION ONLY



Legend:

★ **Scattergood**

★ **Haynes**



Task	Planned	Actual	Acceptable Variance	
HAYNES (HnGS) DEMOLITION – SITE MOBILIZATION	03/04/19	07/09/19	N/A	N/A
HnGS DEMOLITION – UNIVERSAL WASTE CLEARANCE COMPLETE	09/09/19	09/30/19	N/A	N/A
HnGS DEMOLITION – MAINTENANCE BUILDING FOUNDATION COMPLETE	10/18/19	02/11/20	N/A	N/A
HnGS DEMOLITION – ABATEMENT COMPLETE	04/27/20	04/10/20	N/A	N/A
HnGS DEMOLITION – MAINTENANCE BUILDING COMPLETE	05/22/20		N/A	N/A
SCATTERGOOD (SGS) REGULATORY COMPLIANCE	12/31/24	X	02/14/25	11/16/24
HnGS REGULATORY COMPLIANCE	12/31/29	X	02/14/30	11/16/29

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

1. BACKGROUND / PURPOSE

- Compliance with State Water Resources Board deadlines for Once-Through Cooling (OTC) units, December 2024 for Scattergood (SGS) and December 2029 for Haynes (HnGS).
- The purpose of this rate metric is changed to INFORMATION ONLY as the OTC natural gas operations are phasing out due to the Mayor’s announcement not to repower in February 2019.
- For the fiscal year, the major project goals include the completion of waste clearance, asbestos abatement, and the maintenance building installation and relocation.

2. ACHIEVEMENTS / MILESTONES MET

- HnGS Units 3 - 6 Demolition – Demolition contractor TRC Solutions Inc. (TRC) Subcontractor Silverado completed demolition of Tank D, the Cutter Stock tank, and Units 5 and 6 turbine deck concrete. (April 2020)
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 - HnGS Units 3 - 6 Demolition –TRC is fully mobilized on site and is in preparation for hazardous material abatement, universal waste clearance, and the maintenance building installation. (July 2019)
- 3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION**
- The OTC Capital Construction Projects are currently on hold pending detailed transmission system studies on alternatives to repowering and pivot to the Clean Grid LA initiatives.
- 4. MITIGATION PLAN AND / OR RECOMMENDATIONS**
- Monitoring schedule critical paths closely to ensure compliance with milestone targets.

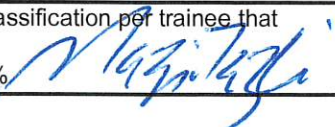
Within Acceptable Variance  Outside Acceptable Variance  Exceeds Target  Needs Attention 

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

RESPONSIBLE MANAGER: Nazir Fazli, Power System Safety and Training (PSST) **REPORTING PERIOD:** April 2020

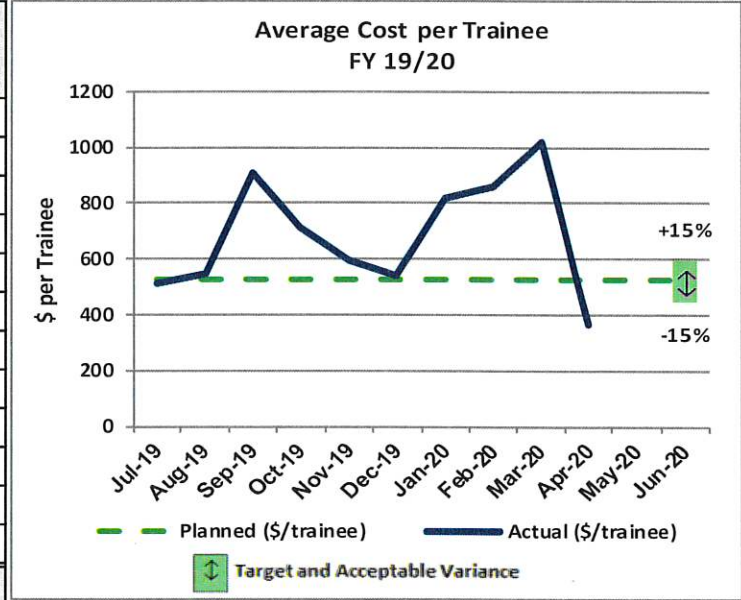
DEFINITION OF RATES METRIC: Average cost of training for Electric Distribution Mechanic Trainee (EDMT) classification per trainee that graduates from the training program

TARGET & ACCEPTABLE VARIANCE (FY 19/20): Target = \$521.5K per EDMT; Acceptable Variance = ± 15%



STATUS: Exceeds Target

FYTD as of:	Planned (\$/trainee)	Actual (\$/trainee)	Variance		Re-Estimate
			\$	%	
Jul-19	521.5	511.3	(10.2)	-2.0%	
Aug-19	521.5	542.5	21.0	4.0%	
Sep-19	521.5	908.3	386.8	74.2%	
Oct-19	521.5	712.6	191.1	36.6%	
Nov-19	521.5	596.3	74.8	14.3%	
Dec-19	521.5	540.4	18.9	3.6%	
Jan-20	521.5	819.1	297.6	57.1%	
Feb-20	521.5	858.0	336.5	64.5%	
Mar-20	521.5	1,015.0	493.5	94.6%	
Apr-20	521.5	362.8	(158.7)	-30.4%	
May-20	521.5				508.2
Jun-20	521.5				508.2
Acceptable Variance			± 15%		-2.6%



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 calendar years as follows:
 - 2014 to 2015: 56%
 - 2016 to 2017: 59%
 - 2018 to 2019: 60%

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 CPT is lower this month mainly due to decreased actuals in the Classroom Trainers for EDM Trainees (Job X7999), Classroom Training for EDM Trainees (Job X7922) and Manage & Administer the PSST Organization

(Job X7955) as compared to the month of March.

- Annualized Job totals for (X7922/X7999/X7955) vary depending on the tools and materials purchased for subsequent new classes.
- The Re-Estimate (\$/trainee) of \$508.2K was calculated using the final figures of the related Jobs (X7922/X7999/X7955) for the entire fiscal year 18/19 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 Outside Acceptable Variance Exceeds Target Needs Attention

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

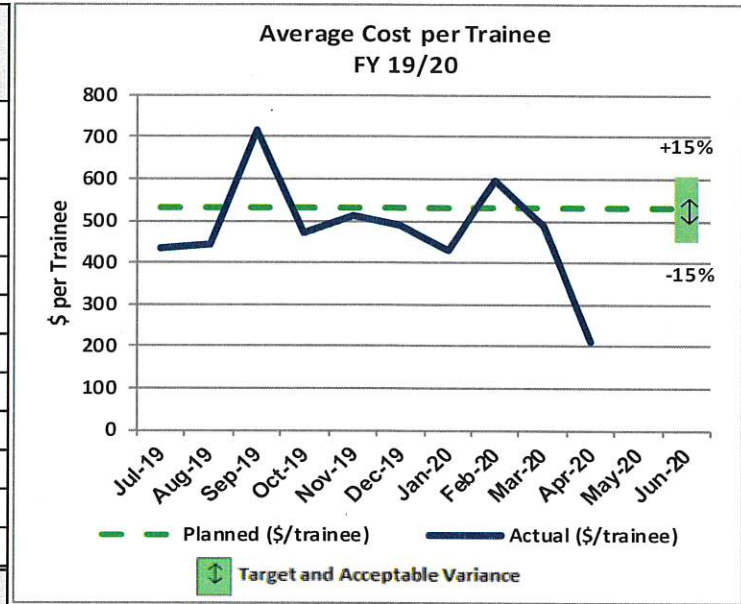
RESPONSIBLE MANAGER: Nazir Fazli, Power System Safety and Training (PSST) **REPORTING PERIOD:** April 2020

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 19/20): Target = \$529.1K per EMT; Acceptable Variance = ± 15%

STATUS: Exceeds Target

FYTD as of:	Planned (\$/trainee)	Actual (\$/trainee)	Variance		Re-Estimate
			\$	%	
Jul-19	529.1	434.6	(94.5)	-17.9%	
Aug-19	529.1	444.6	(84.5)	-16.0%	
Sep-19	529.1	715.4	186.3	35.2%	
Oct-19	529.1	470.0	(59.1)	-11.2%	
Nov-19	529.1	514.2	(14.9)	-2.8%	
Dec-19	529.1	487.9	(41.2)	-7.8%	
Jan-20	529.1	429.1	(100.0)	-18.9%	
Feb-20	529.1	597.5	68.4	12.9%	
Mar-20	529.1	489.6	(39.5)	-7.5%	
Apr-20	529.1	210.5	(318.6)	-60.2%	
May-20	529.1				531.5
Jun-20	529.1				531.5
Acceptable Variance			± 15%		0.5%



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 40-month on-the-job and classroom training program.

2. ACHIEVEMENTS / MILESTONES MET

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

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 CPT is lower this month mainly due to decreased actuals in the Classroom Training for EM Trainees (Job X7923), Classroom Trainers for EM Trainees

(X7926) and Manage & Administer the PSST Organization (Job X7955) as compared to the month of March.

- Annualized Job totals for (X7923/X7926/X7955) vary depending on the tools and materials purchased for subsequent new classes.
- The Re-Estimate (\$/trainee) of \$531.5K was calculated using the final figures of the related Jobs (X7923/X7926/X7955) for the entire fiscal year 18/19 with the 12 month average trainee occupancy.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

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

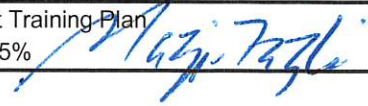
LADWP RATES METRIC – EDMT Graduates (Power)

RESPONSIBLE MANAGER: Nazir Fazli, Power System Safety & Training

REPORTING PERIOD: April 2020

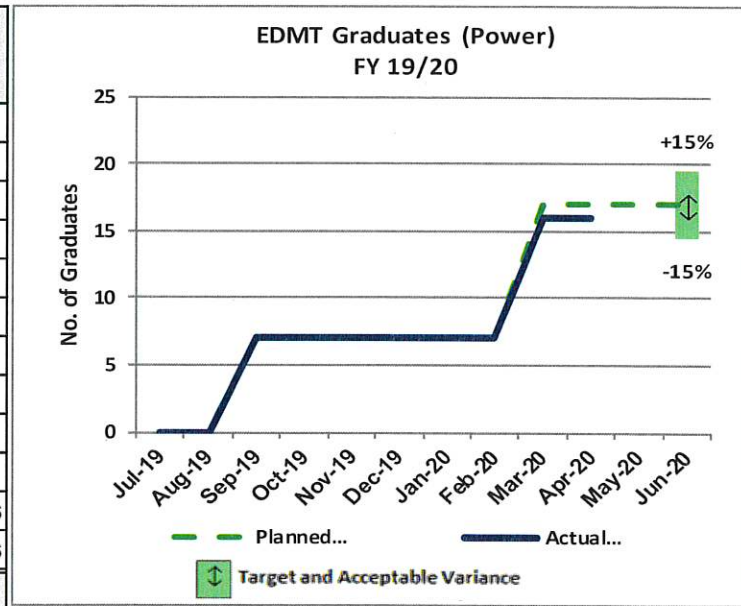
DEFINITION OF RATES METRIC: Electrical Distribution Mechanic Trainee (EDMT) Graduates Against Training Plan

TARGET & ACCEPTABLE VARIANCE (FY 19/20): Target = 17 graduates; Acceptable Variance = ± 15%



STATUS: Within Acceptable Variance

FYTD as of:	Planned (No. of Grads.)	Actual (No. of Grads.)	Variance		Re-Estimate
			No.	%	
Jul-19	0	0	0	0.0%	
Aug-19	0	0	0	0.0%	
Sep-19	7	7	0	0.0%	
Oct-19	7	7	0	0.0%	
Nov-19	7	7	0	0.0%	
Dec-19	7	7	0	0.0%	
Jan-20	7	7	0	0.0%	
Feb-20	7	7	0	0.0%	
Mar-20	17	16	-1	-5.9%	
Apr-20	17	16	-1	-5.9%	
May-20	17				16
Jun-20	17				16
Acceptable Variance			± 15%		-5.9%



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

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

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- Due to the modified screening process, there has been an increase in the quality of candidates who have entered the Training Program, yielding a higher graduation rate.
- There are currently seven active trainee classes in the Training Program.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

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

LADWP RATES METRIC – EMT Graduates (Power)

RESPONSIBLE MANAGER: Nazir Fazli, Power System Safety & Training

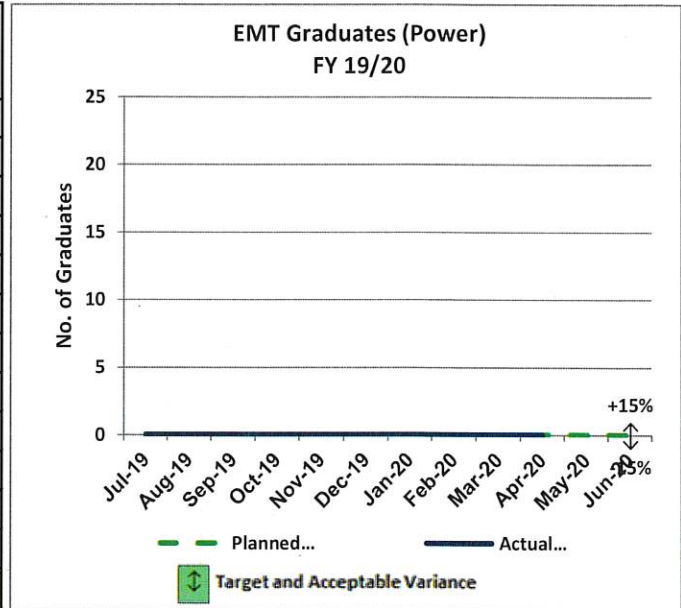
REPORTING PERIOD: April 2020

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

TARGET & ACCEPTABLE VARIANCE (FY 19/20): Target = 0 graduates; Acceptable Variance = ± 15%

STATUS: Within Acceptable Variance

FYTD as of:	Planned (No. of Grads.)	Actual (No. of Grads.)	Variance		Re-Estimate
			No.	%	
Jul-19	0	0	0	0.0%	
Aug-19	0	0	0	0.0%	
Sep-19	0	0	0	0.0%	
Oct-19	0	0	0	0.0%	
Nov-19	0	0	0	0.0%	
Dec-19	0	0	0	0.0%	
Jan-20	0	0	0	0.0%	
Feb-20	0	0	0	0.0%	
Mar-20	0	0	0	0.0%	
Apr-20	0	0	0	0.0%	
May-20	0				0
Jun-20	0				0
Acceptable Variance			± 15%		0.0%



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

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

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- Hiring deficiencies from 2010 through 2013 have resulted in minimal numbers of graduates in recent years.
- There are currently fourteen active trainee classes in the Training Program and four of them are expected to graduate in December 2020 with a projected 41 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.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

- There is an aggressive hiring plan to add approximately 40 to 60 EMTs per year until 2024 to meet PC&M's Integrated Human Resource Plan staffing goals. Restructuring of the Training Program and an increase in training staff has enabled PSST to move forward with this hiring plan while still maintaining the quality and integrity of the program.

LADWP RATES METRIC – Total Renewable Portfolio Standard (Power)

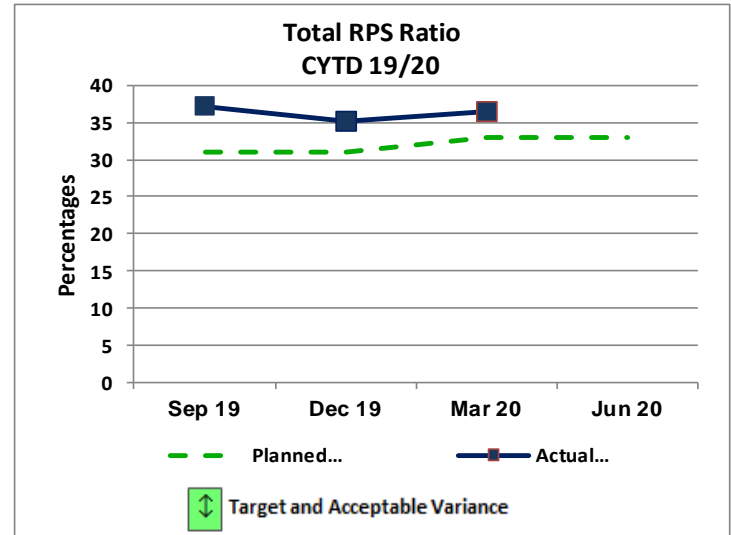
RESPONSIBLE MANAGER: Steven Pruett, Power External Energy Resources  **REPORTING PERIOD:** April 2020

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

TARGET & ACCEPTABLE VARIANCE (FY 19/20): Target = 31% for calendar year 2019 and 33% for calendar year 2020; Acceptable Variance = $\pm 3\%$

STATUS: Exceeds Target

CYTD as of:	Planned (%)	Actual (%)	Variance	Re-Estimate (If Applicable)
			%	
Sep 19	31.0	37.2	6.2%	
Dec 19	31.0	35.1	4.1%	
Mar 20	33.0	36.4	3.4%	
Jun 20	33.0			
Acceptable Variance			$\pm 3\%$	



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

1. BACKGROUND / PURPOSE

- Los Angeles Department of Water and Power (LADWP) is on target to meet the 33% Renewable Portfolio Standard (RPS) ratio requirement in 2020 and 50% in 2030, as required by the California Energy Commission (CEC).
- RPS portfolio includes Wind, Solar, Geothermal, Biomass, and Small Hydro.
- To comply with the CEC, RPS percentages are calculated over four calendar-years (2017-2020), not fiscal year or fiscal year-to-date basis.
- There are other RPS-related Rates Metric Reports for Wind, Solar, Geothermal, and Biomass.
- The Biogas contract was cancelled in May 2018

2. ACHIEVEMENTS / MILESTONES MET

- Springbok 3's Commercial Operation Date (COD) was achieved on 7/19/19.
- LADWP was deemed in compliance with the RPS procurement requirements for Compliance Period 1 (2011-2013) on 4/17/20.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- Actuals for the fourth quarter of FY 19/20 will be available in August 2020.
- Actuals for the third quarter of FY 19/20 exceeded the target due to a seasonal variability and lower retail sales than originally forecasted.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

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

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

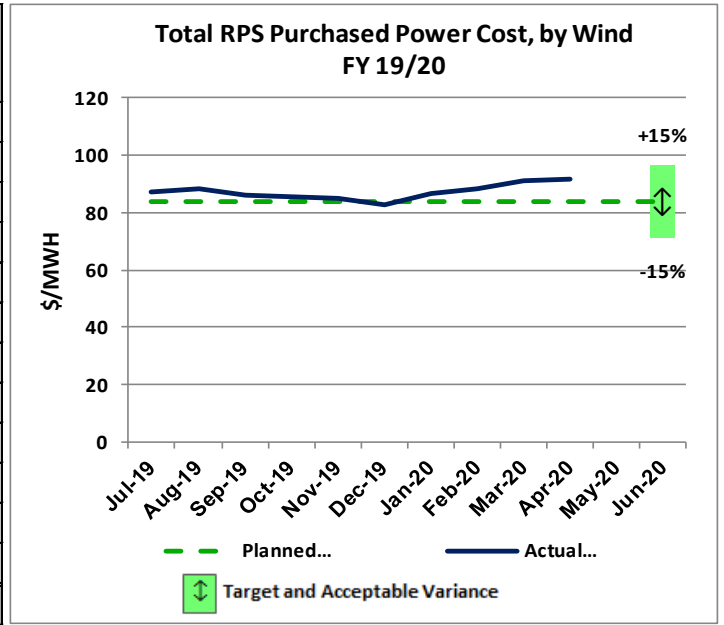
RESPONSIBLE MANAGER: Jan Lukjaniec, Power External Energy Resources *JL* **REPORTING PERIOD:** April 2020

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 19/20): Target = \$83.85/MWH; Acceptable Variance = ± 15%

STATUS: Within Acceptable Variance

FYTD as of:	Planned (\$/MWH)	Actual (\$/MWH)	Variance		Re-Estimate
			\$	%	
Jul-19	83.85	86.96	3.11	3.7%	
Aug-19	83.85	88.11	4.26	5.1%	
Sep-19	83.85	86.23	2.38	2.8%	
Oct-19	83.85	85.33	1.48	1.8%	
Nov-19	83.85	85.18	1.33	1.6%	
Dec-19	83.85	82.94	-0.91	-1.1%	
Jan-20	83.85	86.59	2.74	3.3%	
Feb-20	83.85	88.40	4.55	5.4%	
Mar-20	83.85	91.30	7.45	8.9%	
Apr-20	83.85	91.53	7.68	9.2%	
May-20	83.85				83.85
Jun-20	83.85				83.85
Acceptable Variance			± 15%		0.0%



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

1. BACKGROUND / PURPOSE

- PPA = Power Purchase Agreement. The energy cost is calculated at plant’s “bus-bar”, in dollars per mega-watt-hour (\$/MWH), per executed PPA.
- The aggregated energy costs are the weighted average of seven wind PPAs for which the \$/MWH cost is determined by the seven individual PPAs, but the energy outputs are a function of the individual project’s capacity and wind resource availability, which is variable.
- Wind energy supports meeting Renewable Portfolio Standard (RPS) goals. Wind energy is currently estimated to represent 29% of the Calendar Year 2019 RPS portfolio.

- Contributing Projects and Contracted Price:
 - Pleasant Valley \$63.00 /MWh
 - Willow Creek \$102.32/MWh
 - Pebble Springs \$69.21 /MWh
 - Milford Phase I \$81.27/MWh*
 - Milford Phase II \$95.61/MWh*
 - Windy Flats \$98.87/MWh*
 - Manzana \$82.50/MWh

*Value includes prepay and excess energy cost

2. ACHIEVEMENTS / MILESTONES MET

- PPA projects are performing as expected.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- Performance of the PPA projects is regularly monitored.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

- There is no mitigation plan needed at this time.

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

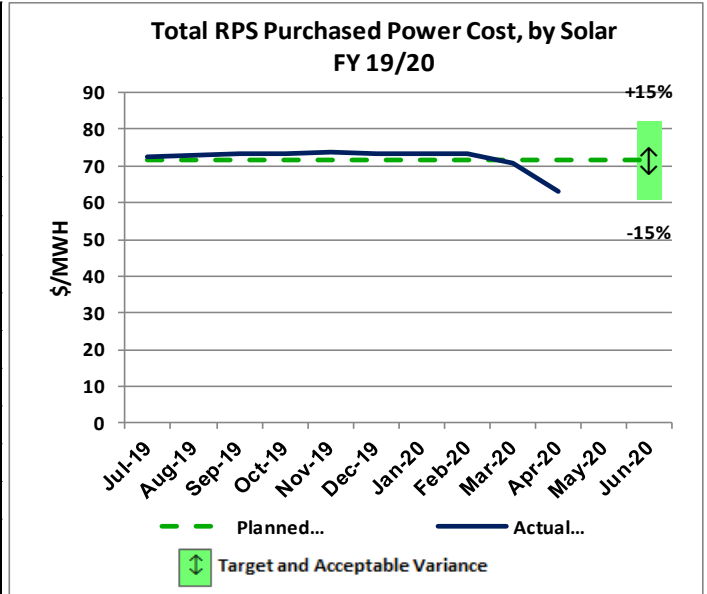
RESPONSIBLE MANAGER: Jan Lukjaniec, Power External Energy Resources *JL* **REPORTING PERIOD:** April 2020

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

TARGET & ACCEPTABLE VARIANCE (FY 19/20): Target = \$71.43/MWH; Acceptable Variance = ± 15%

STATUS: Within Acceptable Variance

FYTD as of:	Planned (\$/MWH)	Actual (\$/MWH)	Variance		Re-Estimate
			\$	%	
Jul-19	71.43	72.58	1.15	1.6%	
Aug-19	71.43	72.79	1.36	1.9%	
Sep-19	71.43	73.40	1.97	2.8%	
Oct-19	71.43	73.25	1.82	2.5%	
Nov-19	71.43	73.77	2.34	3.3%	
Dec-19	71.43	73.26	1.83	2.6%	
Jan-20	71.43	73.40	1.97	2.8%	
Feb-20	71.43	73.43	2.00	2.8%	
Mar-20	71.43	70.71	-0.72	-1.0%	
Apr-20	71.43	62.96	-8.47	-11.9%	
May-20	71.43				71.43
Jun-20	71.43				71.43
Acceptable Variance			± 15%		0.0%



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

1. BACKGROUND / PURPOSE

- PPA = Power Purchase Agreement. The energy cost is calculated at plant’s “bus-bar”, in dollars per mega-watt-hour (\$/MWH), per executed PPA.
- The aggregated energy costs are the weighted average of the solar PPAs for which the \$/MWH cost is fixed by individual PPAs, but the energy outputs are a function of the individual project’s capacity and solar resource availability, which is variable.
- Solar energy supports meeting Renewable Portfolio Standard (RPS) goals. Solar energy is currently estimated to represent 40% of the Calendar Year 2019 RPS portfolio.

- Contributing Projects and Contracted Price:
 - Copper Mountain Solar 3 \$95.75 /MWh
 - Springbok 1 Solar \$68.60/MWh
 - Springbok 2 Solar \$58.65 /MWh
 - RE Barren Ridge \$65.83/MWh
 - Moapa Southern Paiute \$87.69/MWh
 - Beacon Solar 1 \$50.61/MWh
 - Beacon Solar 2 \$56.06/MWh
 - Beacon Solar 3 \$49.47/MWh
 - Beacon Solar 4 \$50.61/MWh
 - Beacon Solar 5 \$57.35/MWh

2. ACHIEVEMENTS / MILESTONES MET

- PPA projects are performing as expected.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- Performance of the PPA projects is regularly monitored.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

- There is no mitigation plan at this point.

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

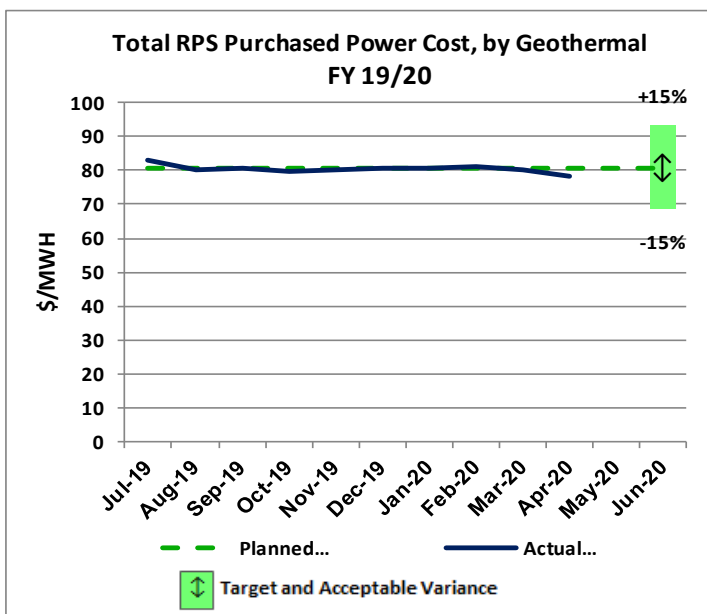
RESPONSIBLE MANAGER: Jan Lukjaniec, Power External Energy Resources *JL* REPORTING PERIOD: April 2020

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 19/20): Target = \$80.86/MWH; Acceptable Variance = ± 15%

STATUS: Within Acceptable Variance

FYTD as of:	Planned (\$/MWH)	Actual (\$/MWH)	Variance		Re-Estimate
			\$	%	
Jul-19	80.86	83.07	2.21	2.7%	
Aug-19	80.86	80.25	-0.61	-0.8%	
Sep-19	80.86	80.67	-0.19	-0.2%	
Oct-19	80.86	79.69	-1.17	-1.4%	
Nov-19	80.86	80.10	-0.76	-0.9%	
Dec-19	80.86	80.50	-0.36	-0.4%	
Jan-20	80.86	80.58	-0.28	-0.3%	
Feb-20	80.86	81.02	0.16	0.2%	
Mar-20	80.86	80.26	-0.60	-0.7%	
Apr-20	80.86	78.20	-2.66	-3.3%	
May-20	80.86				80.86
Jun-20	80.86				80.86
Acceptable Variance			± 15%		0.0%



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

1. BACKGROUND / PURPOSE

- PPA = Power Purchase Agreement. The energy cost is calculated at plant's "bus-bar", in dollars per mega-watt-hour (\$/MWH), per executed PPA.
- The aggregated energy costs are the weighted average of six geothermal PPAs for which the \$/MWH cost is fixed for firm and imbalance energy. However, the energy outputs are a function of the individual project's capacity and geothermal resource availability, which is variable.
- Geothermal energy supports meeting Renewable Portfolio Standard (RPS) goals. Geothermal energy currently represents 24% of the Calendar Year 2019 RPS portfolio.

- Contributing Projects and Contracted Price:
 - Don A Campbell Phase 1 \$99.00/MWh
 - Don A Campbell Phase 2 \$81.25/MWh
 - Hudson Ranch \$90.00/MWh
 - Heber 1 \$81.20/MWh
 - Ormesa Geo Complex \$77.25/MWh
 - ONNGP \$75.50/MWh

2. ACHIEVEMENTS / MILESTONES MET

- PPA projects are performing as expected.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- Performance of the PPA projects is regularly monitored.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

- There is no mitigation plan at this time.

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

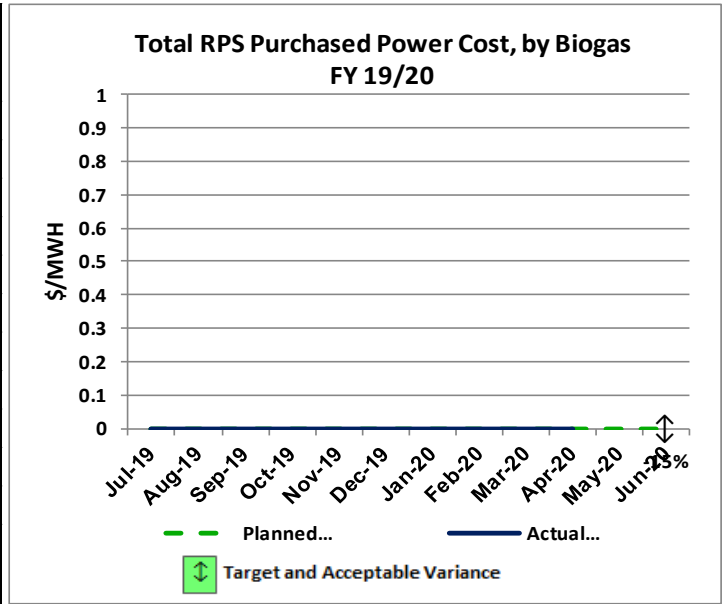
RESPONSIBLE MANAGER: Jan Lukjaniec, Power External Energy Resources *JL* **REPORTING PERIOD:** April 2020

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

TARGET & ACCEPTABLE VARIANCE (FY 19/20): Target = \$0.00/MWH; Acceptable Variance = ± 15%

STATUS: **INFORMATION ONLY**

FYTD as of:	Planned (\$/MWH)	Actual (\$/MWH)	Variance		Re-Estimate
			\$	%	
Jul-19	0.00	0.00	0	0	
Aug-19	0.00	0.00	0	0	
Sep-19	0.00	0.00	0	0	
Oct-19	0.00	0.00	0	0	
Nov-19	0.00	0.00	0	0	
Dec-19	0.00	0.00	0	0	
Jan-20	0.00	0.00	0	0	
Feb-20	0.00	0.00	0	0	
Mar-20	0.00	0.00	0	0	
Apr-20	0.00	0.00	0	0	
May-20	0.00				0.00
Jun-20	0.00				0.00
Acceptable Variance			± 15%		0.0%



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

1. BACKGROUND / PURPOSE

- Biogas fuel supports meeting Renewable Portfolio Standards (RPS) goals.
- Biogas fuel is currently estimated to represent 0% of the FY 19/20 RPS portfolio.
- The metric report is for informational purposes, as the contract for Biogas was cancelled effective May 1, 2018.

2. ACHIEVEMENTS / MILESTONES MET

- No fuel was purchased or delivered since May 2018.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- There are no current plans to enter into future biogas contracts.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

- There is no mitigation plan at this time.
- Should the LADWP enter into future biogas contracts, the metric will likely be updated to include a target and acceptable variance.

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

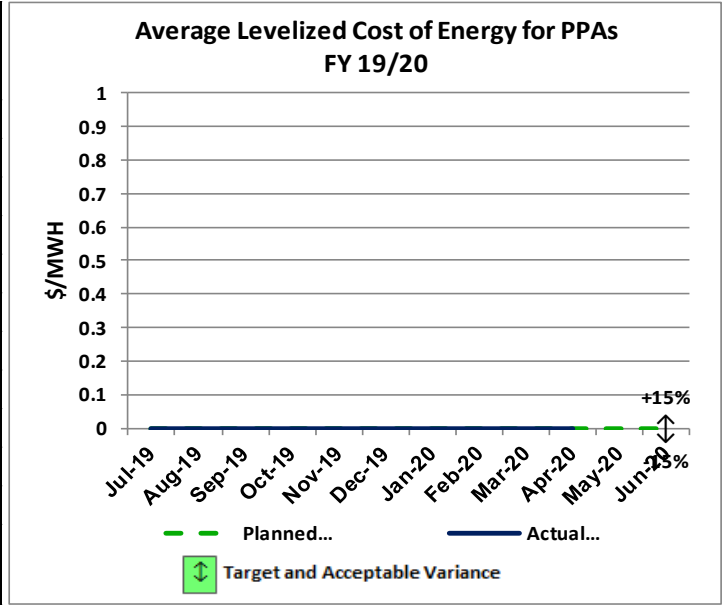
RESPONSIBLE MANAGER: Jan Lukjaniec, Power External Energy Resources *JL* **REPORTING PERIOD:** April 2020

DEFINITION OF RATES METRIC: Cost Per MWH For All Power Purchase Agreements (PPA) Signed During The Previous Fiscal Year

TARGET & ACCEPTABLE VARIANCE (FY 19/20): Target = \$0.00/MWH; Acceptable Variance = ± 15%

STATUS: Within Acceptable Variance

FYTD as of:	Planned (\$/MWH)	Actual (\$/MWH)	Variance		Re-Estimate
			\$	%	
Jul-19	0.00	0.00	0	0	
Aug-19	0.00	0.00	0	0	
Sep-19	0.00	0.00	0	0	
Oct-19	0.00	0.00	0	0	
Nov-19	0.00	0.00	0	0	
Dec-19	0.00	0.00	0	0	
Jan-20	0.00	0.00	0	0	
Feb-20	0.00	0.00	0	0	
Mar-20	0.00	0.00	0	0	
Apr-20	0.00	0.00	0	0	
May-20	0.00				0.00
Jun-20	0.00				0.00
Acceptable Variance			± 15%		0.0%



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

1. BACKGROUND / PURPOSE

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

2. ACHIEVEMENTS / MILESTONES MET

- No contracts were executed in FY 18/19.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- PPA projects are performing as expected.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

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

LADWP RATES METRIC – Power System Reliability Program

Generation, Capital (Power)

RESPONSIBLE MANAGER: Robert Fick, Power Supply Operations

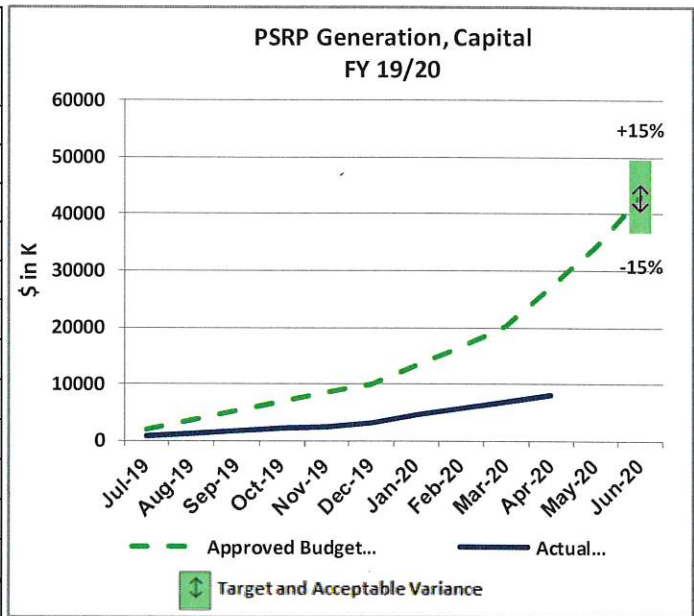
REPORTING PERIOD: April 2020

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

TARGET & ACCEPTABLE VARIANCE (FY 19/20): Target = \$43.1M; Acceptable Variance = ± 15%

STATUS: **Outside Acceptable Variance**

FYTD as of:	Approved Budget (\$ in K)	Actual (\$ in K)	Variance		Re-Estimate (If Applicable)
			\$ in K	%	
Jul-19	1,958.2	807.0	-1,151.2	-58.8%	
Aug-19	3,673.1	1,265.1	-2,408.0	-65.6%	
Sep-19	5,303.8	1,634.0	-3,669.8	-69.2%	
Oct-19	6,953.3	2,060.0	-4,893.3	-70.4%	
Nov-19	8,476.4	2,274.0	-6,202.4	-73.2%	
Dec-19	9,976.2	3,143.0	-6,833.2	-68.5%	
Jan-20	13,218.8	4,437.0	-8,781.8	-66.4%	
Feb-20	16,386.5	5,633.0	-10,753.5	-65.6%	
Mar-20	20,174.3	6,926.0	-13,248.3	-65.7%	
Apr-20	27,160.0	7,919.0	-19,241.0	-70.8%	
May-20	34,164.4				15,904.0
Jun-20	43,071.6				17,350.0
Acceptable Variance			± 15%		-59.7%



SOURCE OF DATA: FI 21186 (KPI # 01.03.01.08)

1. BACKGROUND / PURPOSE

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

2. ACHIEVEMENTS / MILESTONES MET

- Castaic Power Plant (CPP) Station Service Transformer (SST) 2 and 3 Replacements Project – General Construction (GC) demolished the existing pad and prepared forms for a new cement; Electrical Construction completed extending the conduit for the new pad. Percentage Complete – 72%.
- Castaic Power Plant Units 3-7 Main Bank Digester Gas Analyzer (DGA) – Generation Engineering is working on the procurement specifications. Percentage Complete – 18%
- Castaic Power Plant Major Overhaul – Performed general cleaning on Unit 4. Percentage Complete – 65%
- Haynes Generating Station (HnGS) Units 11-16 Spare Main Bank Transformer. Generation Engineering is drafting specification and notice of compliance to procure a spare Main Bank transformer. Percentage Complete – 8%
- San Fernando Power Plant (SFPP) Main Bank 1 Replacement Project – The temporary transformers were placed in service on April 30, 2020 to allow the generators to run and pass water through the penstocks. The switchrack area is ready for GC to demolish the pad next month. Percentage Complete – 68%.
- Valley Generating Station – Unit 6 & 7 Main Bank DGA – Generation Engineering continues to work on the procurement specifications. Percentage Complete – 17%

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- The \$19M cost underrun is driven mostly by the Power System Reliability Program SFPP Project and Emergency Repairs due to the lack of resources from Power Construction and Maintenance Division. Also, the CPP overhaul project is on hold while the cranes undergo major repairs and re-certified for safe operation. There is no estimated date of completion.

Total Project Approved From Inception to FY27/28	\$379.2M
Total Project Estimates	\$268.2M
Projects Approved to Date	\$130.4M
Project Actuals to Date	\$80.6M

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

- Division continues to coordinate with Mechanical Repair Services for CPP Unit Overhaul work.
- Perform routine inspections and maintenance of the cranes to avoid long delay.

Within Acceptable Variance Outside Acceptable Variance Exceeds Target Needs Attention

LADWP RATES METRIC – PSRP Transmission, Capital (Power)

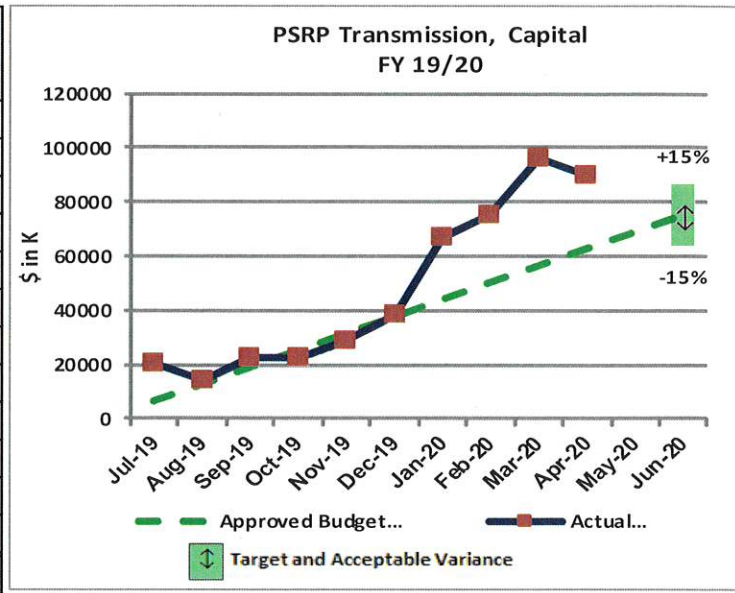
RESPONSIBLE MANAGER: John Hormozi, Power Transmission & Distribution Division *[Signature]* REPORTING PERIOD: April 2020

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

TARGET & ACCEPTABLE VARIANCE (FY 19/20): Target = \$75,226.2K; Acceptable Variance = ± 15%

STATUS: Outside Acceptable Variance

FYTD as of:	Approved Budget (\$ in K)	Actual (\$ in K)	Variance		Re-Estimate
			\$ in K	%	
Jul-19	6,268.9	20,733.0	14,464.1	230.7%	
Aug-19	12,537.8	14,114.0	1,576.2	12.6%	
Sep-19	18,806.7	22,522.0	3,715.3	19.8%	
Oct-19	25,075.6	22,160.0	(2,915.6)	-11.6%	
Nov-19	31,344.5	29,032.0	(2,312.5)	-7.4%	
Dec-19	37,613.4	38,443.0	829.6	2.2%	
Jan-20	43,882.3	66,667.0	22,784.7	51.9%	
Feb-20	50,151.2	75,354.0	25,202.8	50.3%	
Mar-20	56,420.1	96,464.0	40,043.9	71.0%	
Apr-20	62,689.0	89,696.0	27,007.0	43.1%	
May-20	68,957.9				89,695.0
Jun-20	75,226.2				89,695.0
Acceptable Variance			± 15%		19.2%



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

1. **BACKGROUND / PURPOSE**

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

2. **ACHIEVEMENTS / MILESTONES**

- By the end of July 2019, fully installed communication hardware and software for remote monitoring of Sylmar Ground Return System.
- With design essentially complete, Rinaldi-Tarzana Lines 1&2 Reconductoring turned over to Major Projects Section in August 2019 for procurement and construction.
- Replacement of Scattergood-Airport Line 2 began in October 2019; in-service March 2020.
- In November 2019, completed all transmission-related work for the Sylmar Filter Replacement Project, including re-routing the HVDC transmission line to avoid crossing Interstate 5. The Project achieved Substantial Completion in January 2020 and completed a Trial Operation test in February 2020.

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

- Includes charges for work on Job O1373 (Sylmar Filter Replacement Project), which is 60% reimbursable by others. Since reimbursements come in some time after LADWP sends out invoices for work already performed, monthly net expenditures on this job do not necessarily reflect work performed in that given month.
- Remaining oil-filled 138kV circuits are being replaced with 230kV cable. These cost increases apply to Job B1062 (138kV Cable Replacements). Also, \$13.4M of invoices received in June 2019 was charged to FY 19/20, though staff submitted the FY 18/19 accrual

request to Accounts Payable. About \$30M paid to contractors in January 2020, causing a spending uptick for this Functional Item.

- On Job O1373, accelerated construction kept the job on schedule. Received \$12.4M in reimbursements in August 2019, which lowered the overrun variance for the entire FI from July 2019. Received further reimbursements in October 2019 and April 2020.
- FI 21212 includes Annual (perpetual) jobs, so a single FI Estimated Lifetime Expenditure does not apply.
- "Re-estimates" reflect IBIS data. This includes a \$37M increase from a re-assessment of projected FY 19/20 contract costs for Job B1062; \$13.4M for June 2019 invoices was paid in FY 19/20, and the remainder was for a change order to deliver remaining materials rated at 230kV instead of 138kV. The Job Managers have collectively re-estimated FI 21212 at \$112.5M for the fiscal year.

Total Project Approved From Inception to FY 27/28	\$1,746.9M
Projects Approved to Date	\$1,091.2M
Project Actuals to Date	\$907.7M

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

- Re-estimated Job B1062 to account for the FY 19/20 payment of \$13.4M from FY 18/19 invoices.
- Review and re-estimate YTD expenditures for FI 21212 as the fiscal year progresses, though any increase to FI 21212 is restrained by the targeted \$83M Power System Reliability Program (PSRP) budget cut requested by the Ratepayer Advocate (RPA).
- Continue to support progress on these jobs according to their respective milestone schedules.

Within Acceptable Variance Outside Acceptable Variance Exceeds Target Needs Attention

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

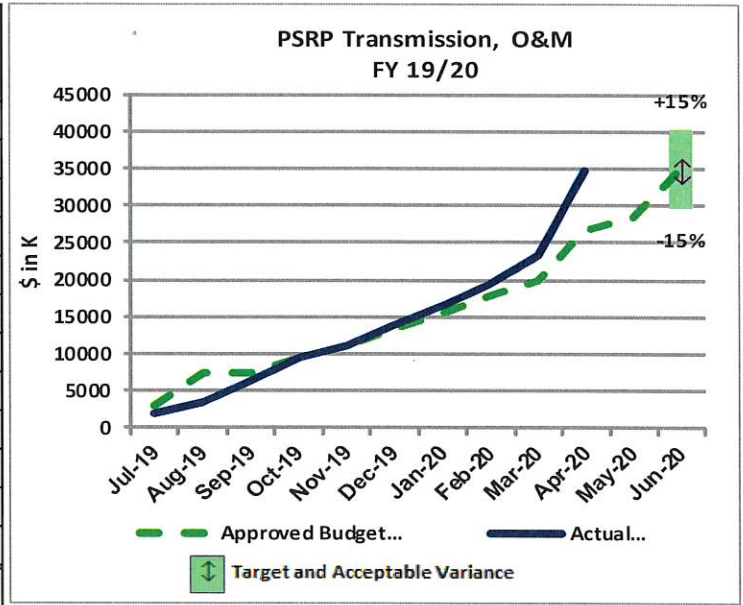
RESPONSIBLE MANAGER: Ruben Hauser, Power Transmission and Distribution **REPORTING PERIOD:** April 2020

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

TARGET & ACCEPTABLE VARIANCE (FY 19/20): Target = \$35,002K; Acceptable Variance = ± 15%

STATUS: Outside Acceptable Variance

FYTD as of:	Approved Budget (\$ in K)	Actual (\$ in K)	Variance		Re-Estimate
			\$ in K	%	
Jul-19	2,917	1,797	-1,119.9	-38.4%	
Aug-19	7,278	3,565	-3,712.5	-51.0%	
Sep-19	7,423	6,448	-974.5	-13.1%	
Oct-19	9,558	9,354	-204.1	-2.1%	
Nov-19	11,131	10,944	-186.8	-1.7%	
Dec-19	13,259	13,777	518.2	3.9%	
Jan-20	15,488	16,427	938.9	6.1%	
Feb-20	17,814	19,394	1,580.5	8.9%	
Mar-20	19,797	23,213	3,416.5	17.3%	
Apr-20	26,741	34,666	7,924.9	29.6%	
May-20	28,532				
Jun-20	35,002				
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

- Job B1232 (Overhead Transmission Lines O&M) is currently overspending due to the job not being budgeted correctly.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

- Job B1232 was not budgeted correctly for current year, however the job is budgeted correctly for program year and out.

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

RESPONSIBLE MANAGER: Kishan Kasondra

REPORTING PERIOD: April 2020

Power Planning, Development, and Engineering Division

DEFINITION OF RATES METRIC: Cost Per Circuit Mile For Underground Circuits

TARGET & ACCEPTABLE VARIANCE (FY 19/20): Target = \$5.5M per mile; Acceptable Variance = ± 15%

STATUS

Outside Acceptable Variance

Kishan Kasondra

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Date: 2020.06.03 07:53:53 -07'00'

	Start	Finish	1Q FY19/20	2Q FY19/20	3Q FY19/20	4Q FY19/20
Scattergood-Airport Line 2	10/15/2019	3/20/2020				
Fairfax-Airport Line 2*	4/6/2020 (old) Mar 2021 (new)	6/15/2020 (old) May 2021 (new)				

SOURCE OF DATA: Job B1062 (KPI # 01.03.01.12)

1. BACKGROUND / PURPOSE

- This is a 5-year project to replace ten (10) aging 138-kV underground transmission circuits for power system reliability. Due to the Mayor’s declaration on February 12, 2019, three (3) of the in-basin coastal plants will not be repowered. As a result, LADWP needs to upgrade six (6) of the ten (10) cable replacements from 138kV to 230-kV to improve reliability and increase circuit rating by 80 percent. This upgrade will provide the capability to support system demands, maintain grid reliability, and be in line with the Clean Grid LA initiatives.
- The first circuit replacement at 230-kV was Fairfax-Airport Line 1 completed in FY18/19. The remaining four (4) circuits will also be replaced at 230-kV.
- The sixth 230-kV replacement is Scattergood-Airport Line 1 (completed in April 2019 at 138-kV). As the upgrades must be done in pairs, this circuit line will be upgraded to 230-kV to match Scattergood-Airport Line 2.
- The cost of the project includes the contract price to replace the ten (10) circuits by contractors and the cost of two stations per circuit installed by in-house crew. However, due to the upgraded voltage and cable size for six (6) of the circuit replacements, it is anticipated that the cumulative cost per mile at the end of the 5th year will be \$5.3M for all ten (10) circuits when they are completed in FY20/21. This cumulative cost now includes contingency costs in the contract amendment approved by the LADWP Board in June 2019.
- The ten (10) circuits included in this project are:
 - Fairfax-Airport Line 1, 2.56 miles (230-kV, completed in FY18/19)
 - *Fairfax-Airport Line 2, 2.52 miles (230-kV, scheduled for March 2021 to May 2021, (date changed due to effects and impact of COVID-19 to construction crews)
 - Fairfax-Gramercy Line 1, 5.59 miles (138-kV, completed in FY16/17)
 - Fairfax-Gramercy Line 2, 5.6 miles (138-kV, completed in FY17/18)
 - Fairfax-Olympic Cable A, 5.89 miles (138-kV, completed FY18/19)
 - Fairfax-Olympic Cable B, 5.87 miles (138-kV, completed in FY18/19)
 - Scattergood-Airport Line 1, 5.05 miles (138-kV, completed in FY18/19, will be replaced at 230-kV)

- Scattergood-Airport Line 2, 5.04 miles (230-kV, completed in FY 19/20)
- Tarzana-Olympic Line 1A, 3.21 miles
- Tarzana-Olympic Line 1B, 3.21 miles

2. ACHIEVEMENTS / MILESTONES MET

- As of April 2020, 100% of the Scattergood-Airport Line 2 cable system has been removed, 100% of the cable was installed, 100% of the splicing has been completed, and 100% of the testing has been completed.
- The Scattergood-Airport Line 2 cable system project was completed during the month of March 2020.
- The Fairfax-Airport Line 2 cable replacement was postponed to 2021 due to the impacts of COVID-19. Therefore, during the month of April 2020, no work was completed.
- The Scattergood-Airport Line 1 was scheduled for 230-kV upgrade completion in spring 2021 but has been pushed out to spring 2023 due to the delay to Fairfax-Airport Line 2 project.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

	Types	Target	Actuals/ Trending Cost ²	Variance (%)
FY16/17	Contract Cost	\$2.7M/mile ¹	\$2.6M/mile	-3.7%
	Station Cost	-	\$0.6M/mile	-
FY17/18	Contract Cost	\$2.5M/mile	\$2.3M/mile	+12%
	Station Cost		\$0.5M/mile	
FY18/19	Contract Cost	\$2.8M/mile	\$3.9M/mile	+57.1%
	Station Cost		\$0.5M/mile	
FY19/20 (YTD)	Contract Cost	\$5.5M/mile	\$10.0 M/mile	+101.8%
	Station Cost		\$1.1M/mile	
Cumulative Cost	Contract Cost	\$5.3M/mile ³	\$4.1M/mile	-11.3%
	Station Cost		\$0.6M/mile	

- Notes:
- \$2.7M/mile target was based on the total contract cost for the replacement of 10 circuits. It was reforecast to \$2.9M/mile due to the use of larger cable to increase the line operating capacity.
 - Trending costs are costs incurred year-to-date while the circuit replacement is still on-going.
 - Target cumulative cost is updated from \$4.4M/mile to \$5.3M/mile in June 2019 reporting due to upgrade from 138kV to 230kV rated cable and including contingency costs.

Within Acceptable Variance Outside Acceptable Variance Exceeds Target Needs Attention

- Because the actual cost per circuit mile will only be available upon completion of the circuit replacement, which may not fall within the current fiscal year, “trending costs” are provided if the final actuals are not available.
- The actual cost per circuit mile may vary significantly each year depending on the circuits to be replaced and the need to use the contingency provisions of the contract.
- Contract invoices totaling \$13.2M were paid in July, which were for change orders related to Fairfax-Airport Line 1 (mainly for upgrades from 138-kV to 230-kV) and Scattergood-Airport Line 1 (additional cost due to delays in Los Angeles World Airport) which was completed in FY18/19. The invoices were sent to Accounts Payable (A/P) for accrual in FY 18/19. However, the charges hit FY19/20.
- A \$30M invoice was processed in January 2020, which increased the Year-to-Date trending cost significantly.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

- There is no mitigation plan at this time.

LADWP RATES METRIC – PSRP Substation, Capital (Power)

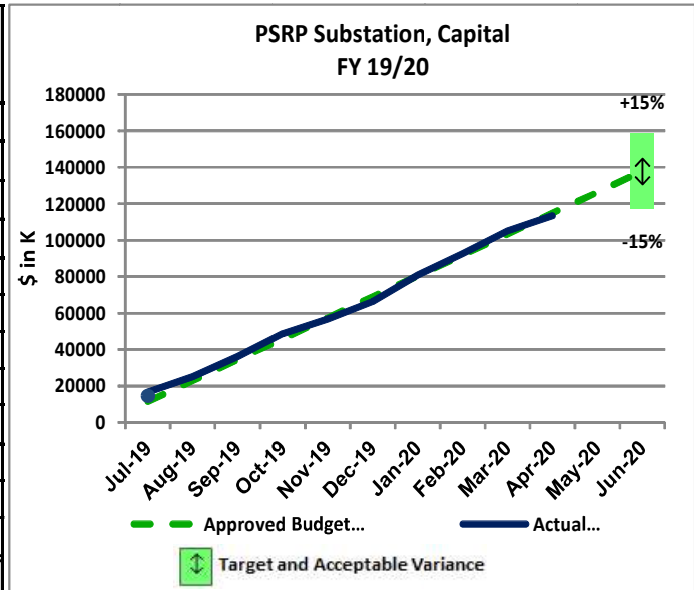
RESPONSIBLE MANAGER: Sharat Batra *Sharat Batra* Digitally signed by Sharat Batra
Date: 2020.05.27 11:35:00 -0700
Power Planning, Development, and Engineering Division

REPORTING PERIOD: April 2020

DEFINITION OF RATES METRIC: Board Approved Annual Budget vs. Actual Expenditures For PSRP Substation, Capital
TARGET & ACCEPTABLE VARIANCE (FY 19/20): Target = \$137,810K; Acceptable Variance = ± 15%

STATUS: Within Acceptable Variance

FYTD as of:	Approved Budget (\$ in K)	Actual (\$ in K)	Variance		Re-Estimate (\$ in K)
			\$ in K	%	
Jul-19	11,484.2	16,617.0	5,132.8	44.7%	
Aug-19	22,968.4	25,073.0	2,104.6	9.2%	
Sep-19	34,452.6	36,153.0	1,700.4	4.9%	
Oct-19	45,936.8	48,657.0	2,720.2	5.9%	
Nov-19	57,421.0	56,803.0	-618.0	-1.1%	
Dec-19	68,905.2	66,279.0	-2,626.2	-3.8%	
Jan-20	80,389.4	80,865.0	475.6	0.6%	
Feb-20	91,873.6	92,651.0	777.4	0.8%	
Mar-20	103,357.8	105,093.0	1,735.2	1.7%	
Apr-20	114,842.0	113,312.0	-1,530.0	-1.3%	
May-20	126,326.2				121,206.5
Jun-20	137,810.4				129,101.0
Acceptable Variance			± 15%		-6.3%



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 and circuit breaker replacement and substation automation progress are captured in the KPIs in the table below:

KPI	PSRP Replacements or Upgrades:	FYTD Actual	FYTD Target	FYE Target	Will meet FY 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)	1	2	2	No
04.01.01.81	High Voltage Transformers (high side 100kV to 230kV - RS, SS)	0	0	2	No
04.01.01.77	Medium Voltage Transformers (high side below 100kV – Distributing Station - DS)	6	12	21	No
CIRCUIT BREAKER REPLACEMENT:					
04.01.01.78	Transmission Circuit Breakers (>100kV - RS, SS, High Voltage Alternate Current Switchyards)	2	0	2	Yes
04.01.01.79	Sub-transmission Circuit Breakers (34.5kV - RS, DS)	3	15	18	No
04.01.01.80	Distribution Circuit Breakers (4.8kV - DS)	8	12	16	No
SUBSTATION AUTOMATED :					
04.01.03.01	Distributing or Receiving Station Upgrade/Automation	7	10	12	No

Additional year-to-date achievements and milestones include:

- **4.8kV Feeder Circuit Upgrades and New Installations:** (7) Construction Work Packages (CWP) issued; (14) 4.8kV Feeders placed in-service.
- **Substation Equipment Life Extensions:** (1) RS Transformer, (3) DS Transformers, (41) 34.5kV circuit breakers and (80) 4.8kV circuit breakers completed.
- Issued CWP for RS-E Bank H B-phase demolition in support of the Victorville-Los Angeles project.

Within Acceptable Variance Outside Acceptable Variance Exceeds Target Needs Attention

- In support of the 2020 Summer Resiliency Plans, the following CWP's have been issued:
 - Issued CWP on January 27, 2020 for DS 101 Bank 1 Replacement
 - Issued CWP on April 8, 2020 for DS 16 Bank 3 Replacement
 - Issued CWP on April 16, 2020 for DS 36 Bank 1 Upgrade from 15 MVA to 20 MVA

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- This Functional Item (FI) is projected to underspend due to jobs being deferred, such as acquiring a site for the new Distributing Station 97. In addition, due to the current COVID-19 pandemic, it is estimated that construction and test support will be limited due to minimum physical and social distancing requirements in spaces such as control rooms, which will result in certain KPI targets not to be met, such as Substation Automation.
- FI 211-95 includes Annual (perpetual) jobs, so single estimated lifetime expenditure does not apply.

Total Project Approved From Inception to FY27/28	\$2,774.1M
Project Approved to Date	\$1,416.2M
Project Actuals to Date	\$1,287.4M

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

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

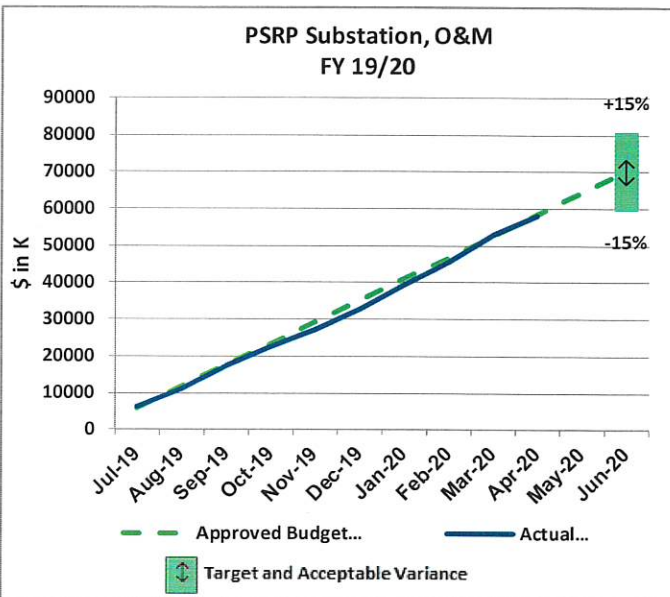
REPORTING PERIOD: April 2020

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

TARGET & ACCEPTABLE VARIANCE (FY 19/20): Target = \$70,182K; Acceptable Variance = ± 15%

STATUS: Within Acceptable Variance

FYTD as of:	Approved Budget (\$ in K)	Actual (\$ in K)	Variance		Re-Estimate
			\$ in K	%	
Jul-19	5,848.5	6,063.0	214.5	3.7%	
Aug-19	11,697.0	11,105.0	-592.0	-5.1%	
Sep-19	17,546.0	17,453.0	-93.0	-0.5%	
Oct-19	23,394.0	22,602.0	-792.0	-3.4%	
Nov-19	29,243.0	26,996.0	-2,247.0	-7.7%	
Dec-19	35,091.0	32,792.0	-2,299.0	-6.6%	
Jan-20	40,940.0	39,233.0	-1,707.0	-4.2%	
Feb-20	46,788.0	45,620.0	-1,168.0	-2.5%	
Mar-20	52,636.5	52,893.0	256.5	0.5%	
Apr-20	58,485.0	58,091.0	-394.0	-0.7%	
May-20	64,333.5				
Jun-20	70,182.0				
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.

2. ACHIEVEMENTS/MILESTONES MET

- See attached Supplemental Summary for the monthly breakdown of restorations and work completed.
- Electrical Station Maintenance (ESM) serves as facility manager of over 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.

3. PERFORMANCE/VARIANCE ANALYSIS & YEAR END PROJECTION

- Overspending for the month of July was due to emergency response to two flashover incidents; Receiving Station (RS)-U 34.5kV circuit breaker (CB) #22, RS-Halldale 138kV Bank 1. The flashover repairs were main contributors to the O&M overage. ESM assigned several trainees to assist with the flashover repairs in order to gain experience.
- Underspending for the month of August was due to ESM Valley, West LA, and South crews attending Annual Refresher Course training. In addition, ESM crews were working on work activities other than O&M. ESM crews performed maintenance work on the annual Ely Microwave run. ESM also assisted Electrical Construction with capital work at Sylmar. ESM is expected to spend on target. Spending fluctuates due to the nature of ESM's work, which includes emergency response, repair, etc.
- Underspending continued in September mainly due to ESM resources diverted to assisting Glendale Water & Power. ESM assisted Glendale Water & Power by replacing six bushings in one of Glendale's transformers. During the month of September, ESM performed seven Transformer Life Extension activities.

Within Acceptable Variance Outside Acceptable Variance Exceeds Target Needs Attention

- During the month of October, ESM resources were diverted from O&M work to cover the following large scale Capital projects: RS-J Bank B re-gasket project, Sylmar Scheduled Inspection and Repair (SIR), and Haynes Generating Station Unit 9 transformer repair. In addition, ESM completed Annual Refresher Course training.
- Underspending continued in November mainly due to ESM dedicating their resources to capital jobs such as, RS-J and U re-gasket projects, Sylmar SIR, and the main transformer repair at Haynes Unit 9.
- Underspending continued in December mainly due to ESM dedicating their resources to capital work activities and Generation support. ESM crews performed activities such as, working on the RS-U Bank C oil leak repair and refurbishment, working on the Haynes GS unit 11/12 battery replacement project, repairing the 230kV CB E-74, and reclaiming the SF6 gas, disassembling the mechanism to replace seals, cleaning and re-installing the gas and returning it to service.
- Underspending continued in January mainly due to ESM dedicating their resources to capital work activities and Generation support. ESM crews progressed work on the following Capital projects; RS-E Bank B transformer life extension, oil leak repair, and refurbishment; RS-U Bank C transformer life extension, oil leak repair, and refurbishment. ESM also completed filling 10 new 34.5kV CB with SF6 gas at Rinaldi and supported Harbor Generation Station during the SIR on Unit 1.
- Underspending continued in February mainly due to ESM dedicating their resources to capital work activities and Generation support. ESM crews completed the RS-E Bank B transformer life extension, oil leak, repair, and refurbishment. ESM crews also completed two customer station transformer life extensions. ESM crews also provided support on the Harbor Generating Station Unit 10 & Unit 11 SIRs as well as the Scattergood Unit 1 SIR. ESM also completed circuit breaker life extensions on 14 circuit breakers.
- Overspending in March was largely due to the following: ESM performed 12 scheduled 34.5kV CB mechanism overhauls, inspected and repaired 12 - 34.5kV CB's, performed 11 - 4.8kV CB mechanism overhauls, and responded to multiple transformer bank trouble issues at RS & DS stations.
- Underspending in April was due to impacts resulting from COVID-19 and the mitigating measures that have been taken such as Rotational Work Assignments, Modified Telecommuting, and

Paid Administrative Leave. The impacts of COVID-19 have reduced our workforce in the field by approximately 50%. Additionally, crews have been directed to reduce the amount of routine maintenance scheduled and performed, and to focus on equipment repairs and restoration efforts.

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. Between now and December 2020, ESM expects to lose several EMs to promotions or retirements. As EMs are more challenging to fill, Power Construction & Maintenance (PCM) plans to revitalize the Battery Technician classification to perform the work. The Battery Technician class remains in the early planning stage. Once completed, PCM plans to hire Battery Technicians and additional Electrical Craft Helpers in lieu of EMs, as well as additional administrative personnel. This program, however, is in the early planning stages, and will not likely affect this FI for several years.

Within Acceptable Variance  Outside Acceptable Variance  Exceeds Target  Needs Attention 

ACHIEVEMENTS / MILESTONES MET

The following table details the monthly breakdown of Substation O&M activity since JULY 2019.

	JULY 2019	AUG 2019	SEPT 2019	OCT 2019	NOV 2019	DEC 2019	JAN 2020	FEB 2020	MAR 2020	APR 2020	MAY 2020	JUNE 2020	TOTAL
NO. OF RESTORATIONS OF CUSTOMER CIRCUITS:													
Receiving Stations (RS) Circuit Outages	65	36	34	55	23	53	54	43	37	41			441
Distributing Station (DS) Circuit Outages	81	57	60	65	57	124	73	98	75	47			737
5-kV Circuit Grounds	42	34	31	38	53	99	46	56	63	39			501
NO. OF INSULATOR WASHINGS:													
Generating Stations	0	0	0	0	0	0	0	0	0	0			0
Receiving Stations	8	7	5	5	4	4	4	6	7	3			53
Distributing Stations	17	9	11	16	9	8	14	8	10	22			124

LADWP RATES METRIC – PSRP Distribution, Capital (Power)

RESPONSIBLE MANAGER: Sager Farraj
Power Planning, Development, and Engineering Division

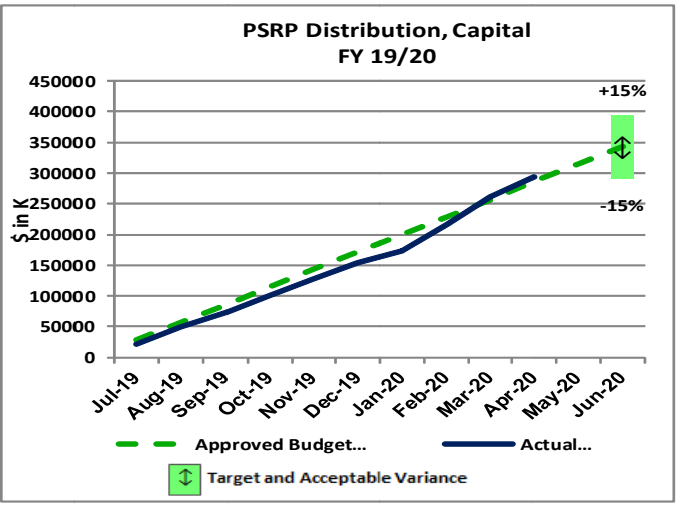
REPORTING PERIOD: April 2020

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

TARGET & ACCEPTABLE VARIANCE (FY 19/20): Target = \$343,223.5K; Acceptable Variance = ± 15%

STATUS: Within Acceptable Variance

FYTD as of:	Approved Budget (\$ in K)	Actual (\$ in K)	Variance		Re-Estimate
			\$ in K	%	
Jul-19	28,602.0	21,094.0	-7,508.0	-26.2%	
Aug-19	57,204.0	49,617.0	-7,587.0	-13.3%	
Sep-19	85,806.0	72,272.0	-13,534.0	-15.8%	
Oct-19	114,408.0	100,317.0	-14,091.0	-12.3%	
Nov-19	143,010.0	126,809.0	-16,201.0	-11.3%	
Dec-19	171,612.0	154,398.0	-17,214.0	-10.0%	
Jan-20	200,214.0	174,101.0	-26,113.0	-13.0%	
Feb-20	228,816.0	215,148.0	-13,668.0	-6.0%	
Mar-20	257,418.0	262,574.0	5,156.0	2.0%	
Apr-20	286,020.0	294,010.0	7,990.0	2.8%	
May-20	314,622.0				304,125.5
Jun-20	343,223.5				314,241.0
Acceptable Variance			± 15%		-8.4%



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: 5% (Jobs P6309 & P6394)
 - Poles: 38% (Job P6322)
 - Crossarms: 8% (Job P6318)
 - Cables: 17% (Job P6306)

2. ACHIEVEMENTS / MILESTONES MET

- Distribution Reliability spent 103% of the budget through the month of April to work on and complete the following:
 - New rack & bank installation RS-Rinaldi & RS-B
 - 643 transformer installations
 - 3,313 pole replacements
 - 9,006 deteriorated crossarm replacements
 - 50.2 circuit-miles of cable replacements
 - 8,914 FIX-IT tickets (Jobs P6318, P6322, P6394, P6306, P6309 & O1357)
 - Work continued on Owens Valley-overhead/underground installations & removals, asbestos removals, trouble ticket repairs & service restorations due to outages.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- Variance through the month of April is \$8.0M, 2.8% above budget.
- This is due to District crews focusing resources on PSRP distribution capital projects.

Total Project Approved From Inception to FY27/28	\$6,295.9M
Projects Approved to Date	\$2,856.2M
Project Actuals to Date	\$2,710.8M

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

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

- No mitigation plan at this point.

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

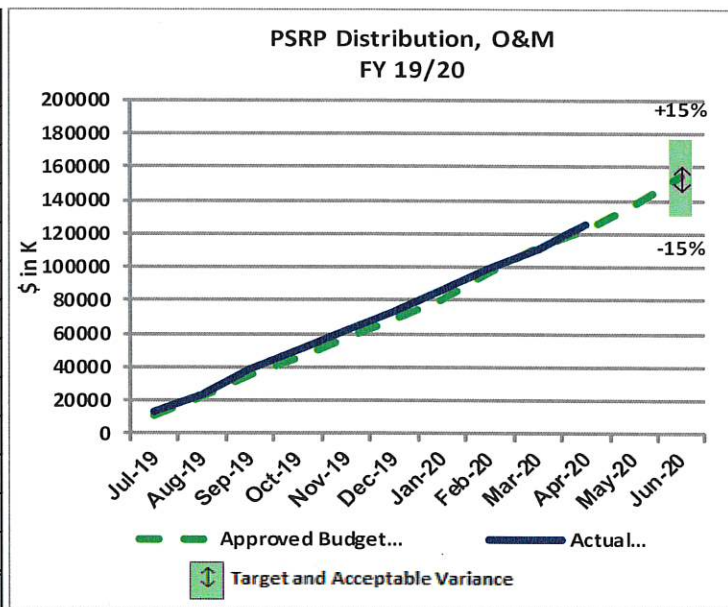
RESPONSIBLE MANAGER: *Arthur Johnson*, Power Transmission and Distribution REPORTING PERIOD: April 2020

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

TARGET & ACCEPTABLE VARIANCE (FY 19/20): Target = \$154,124K; Acceptable Variance = ± 15%

STATUS: **Within Acceptable Variance**

FYTD as of:	Approved Budget (\$ in K)	Actual (\$ in K)	Variance		Re-Estimate (If Applicable)
			\$ in K	%	
Jul-19	10,286	12,982	2,696.0	26.2%	
Aug-19	22,679	23,999	1,320.0	5.8%	
Sep-19	34,579	38,123	3,543.7	10.2%	
Oct-19	45,494	50,371	4,877.3	10.7%	
Nov-19	56,585	61,869	5,284.3	9.3%	
Dec-19	69,201	73,410	4,209.0	6.1%	
Jan-20	80,794	85,979	5,185.0	6.4%	
Feb-20	96,384	99,238	2,854.0	3.0%	
Mar-20	111,188	110,188	-1,000.3	-0.9%	
Apr-20	122,484	125,447	2,963.3	2.4%	
May-20	136,621				
Jun-20	154,124				
Acceptable Variance			± 15%		



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

1. BACKGROUND / PURPOSE

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

2. ACHIEVEMENTS / MILESTONES MET

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

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- This KPI is within its 15% threshold set for its goal. Currently, the FI is projected to be within the acceptable variance threshold of the approved budget, \$154,124, by FYE.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

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

Within Acceptable Variance Outside Acceptable Variance Exceeds Target Needs Attention

LADWP RATES/EQUITY METRIC – Transformer Replacement (Power)

RESPONSIBLE MANAGER: Arthur Johnson, Power Transmission and Distribution
 EQUITY CORE CATEGORY: Water and Power Infrastructure Investment

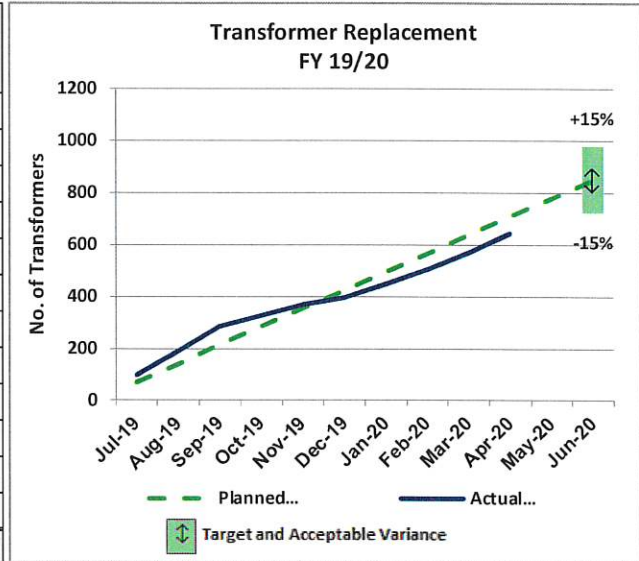
REPORTING PERIOD: April 2020

DEFINITION OF RATES METRIC: Number of Transformers Replaced Against Plan

TARGET & ACCEPTABLE VARIANCE (FY 19/20): Target = 850; Acceptable Variance = ± 15%

STATUS: Within Acceptable Variance

FYTD as of:	Planned (No.)	Actual (No.)	Variance		Re-Estimate
			No.	%	
Jul-19	71	97	26	36.6%	
Aug-19	142	189	47	33.1%	
Sep-19	212	284	72	34.0%	
Oct-19	283	327	44	15.5%	
Nov-19	354	367	13	3.7%	
Dec-19	425	398	-27	-6.4%	
Jan-20	496	447	-49	-9.9%	
Feb-20	566	501	-65	-11.5%	
Mar-20	637	567	-70	-11.0%	
Apr-20	708	643	-65	-9.2%	
May-20	779				779
Jun-20	850				850
Acceptable Variance			± 15%		0.0%



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

1. BACKGROUND / PURPOSE

- Replace 850 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 800 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.

3. ACHIEVEMENTS / MILESTONES MET

- To date, the target was to replace 708 transformers and the current actual number of transformers replaced is 643.

4. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- The actual number of transformers replaced is within the ±15% threshold.

5. MITIGATION PLAN AND / OR RECOMMENDATIONS

- PTD will continue to monitor and adjust the job as the year progresses to ensure we reach our goals.

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: Arthur Johnson, Power Transmission and Distribution
 EQUITY CORE CATEGORY: Water and Power Infrastructure Investment

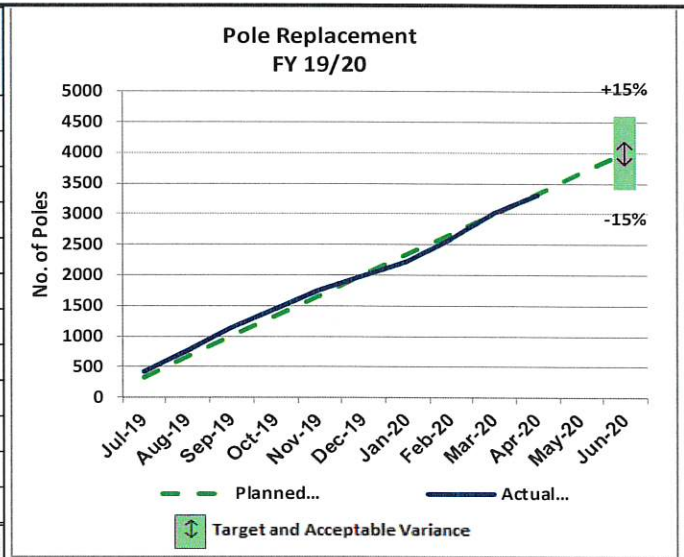
REPORTING PERIOD: April 2020

DEFINITION OF RATES METRIC: Number of Poles Replaced Against Plan

TARGET & ACCEPTABLE VARIANCE (FY 19/20): Target = 4,000; Acceptable Variance = ± 15%

STATUS: Within Acceptable Variance

FYTD as of:	Planned (No.)	Actual (No.)	Variance		Re-Estimate
			No.	%	
Jul-19	333	419	86	25.8%	
Aug-19	667	777	110	16.5%	
Sep-19	1,000	1,132	132	13.2%	
Oct-19	1,333	1,455	122	9.2%	
Nov-19	1,667	1,759	92	5.5%	
Dec-19	2,000	1,987	-13	-0.7%	
Jan-20	2,333	2,230	-103	-4.4%	
Feb-20	2,666	2,590	-76	-2.9%	
Mar-20	3,000	3,014	14	0.5%	
Apr-20	3,333	3,313	-20	-0.6%	
May-20	3,666				3,666
Jun-20	4,000				4,000
Acceptable Variance			± 15%		0.0%



SOURCE OF DATA: Jobs P6322 (KPI # 04.01.01.03)

1. BACKGROUND / PURPOSE

- Replace 4,000 deteriorated poles due to age or other damage. Power Transmission and Distribution (PTD) maintains approximately 321,000 poles in its system. These poles have an average life span of fifty years. These poles support switches, light fixtures, transformers, and underground cables transitioning to an overhead termination, communication cables, crossarms and conductors at different voltage levels. Work is completed by Distribution Construction & Maintenance (DC&M) district and contract crews. This work is required to maintain compliance with California Public Utilities Commission (CPUC) General Order 165- Inspection Cycles for Electric Distribution Facilities, and our Power System Reliability Program (PSRP).

vary month to month due to large jobs being closed on certain dates.

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.

2. CRITERIA

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

3. ACHIEVEMENTS / MILESTONES MET

- To date, the target was to replace 3,333 poles and the current actual number of poles replaced is 3,313.

4. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- The actual number of poles replaced is within the 15% threshold target. Replacements will

Within Acceptable Variance Outside Acceptable Variance Exceeds Target Needs Attention

LADWP RATES METRIC – Crossarm Replacement (Power)

RESPONSIBLE MANAGER: Arthur Johnson, Power Transmission and Distribution

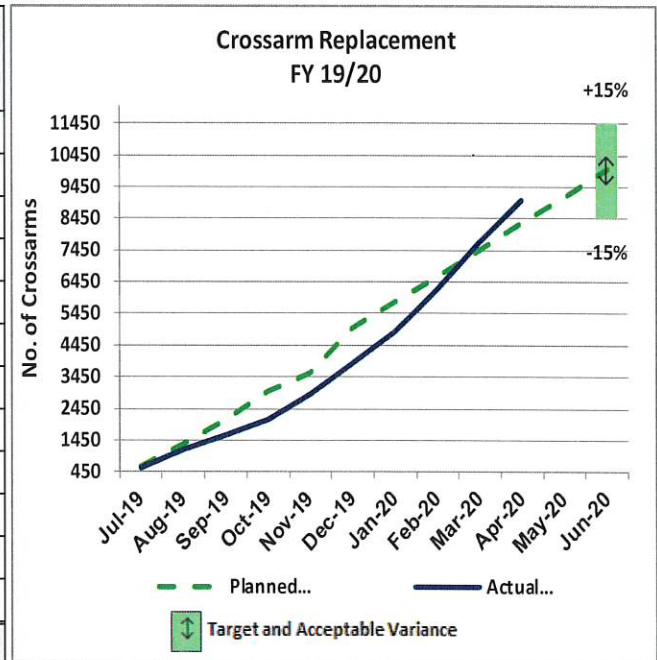
REPORTING PERIOD: April 2020

DEFINITION OF RATES METRIC: Number of Crossarms Replaced Against Plan

TARGET & ACCEPTABLE VARIANCE (FY 19/20): Target = 10,000; Acceptable Variance = ± 15%

STATUS: Within Acceptable Variance

FYTD as of:	Planned (No.)	Actual (No.)	Variance		Re-Estimate
			No.	%	
Jul-19	600	585	-15	-2.5%	
Aug-19	1,350	1,151	-199	-14.7%	
Sep-19	2,100	1,586	-514	-24.5%	
Oct-19	3,000	2,112	-888	-29.6%	
Nov-19	3,550	2,887	-663	-18.7%	
Dec-19	5,000	3,892	-1,108	-22.2%	
Jan-20	5,800	4,872	-928	-16.0%	
Feb-20	6,630	6,202	-428	-6.5%	
Mar-20	7,460	7,749	289	3.9%	
Apr-20	8,290	9,006	716	8.6%	
May-20	9,120				9,120
Jun-20	10,000				10,000
Acceptable Variance			± 15%		0.0%



SOURCE OF DATA: Jobs P6318 (KPI #04.01.01.21)

1. BACKGROUND / PURPOSE

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

2. ACHIEVEMENTS / MILESTONES MET

- To date, the target was to replace 8,290 crossarms and the current actual number of crossarms replaced is 9,006.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- The number of crossarms replaced falls within the ±15% threshold.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

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

Within Acceptable Variance Outside Acceptable Variance Exceeds Target Needs Attention

LADWP RATES/EQUITY METRIC – Cable Replacement (Power)

RESPONSIBLE MANAGER: Sager Farraj
Power Planning, Development, and Engineering Division

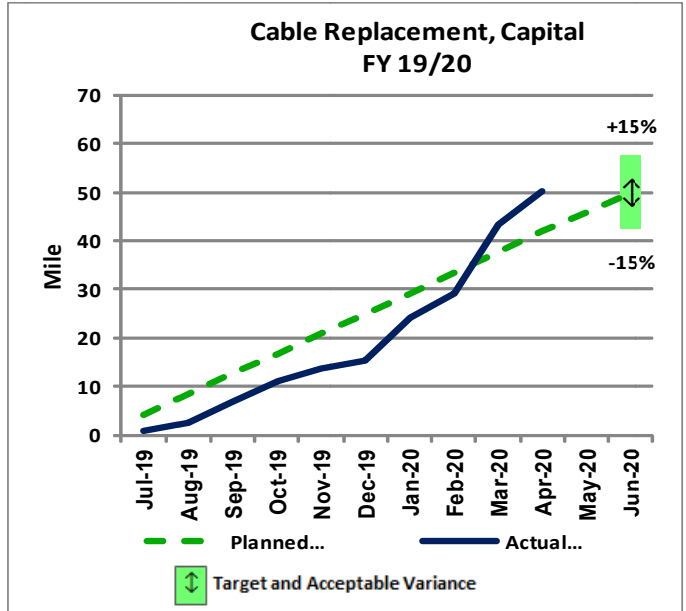
REPORTING PERIOD: April 2020

EQUITY CORE CATEGORY: Water & Power Infrastructure Investment

DEFINITION OF RATES METRIC: No. of Miles of Cable Replaced Against Plan
TARGET & ACCEPTABLE VARIANCE (FY 19/20): Target = 50 miles; Acceptable Variance = ±15%

STATUS: Exceeds Target

FYTD as of:	Planned (Mile)	Actual (Mile)	Variance		Re-Estimate
			Mile	%	
Jul-19	4.2	1.0	-3.2	-76.2%	
Aug-19	8.4	2.6	-5.8	-69.0%	
Sep-19	12.6	6.8	-5.8	-46.0%	
Oct-19	16.8	11.1	-5.7	-33.9%	
Nov-19	21.0	13.7	-7.3	-34.8%	
Dec-19	25.0	15.2	-9.8	-39.2%	
Jan-20	29.2	24.2	-5.0	-17.1%	
Feb-20	33.4	29.0	-4.4	-13.2%	
Mar-20	37.6	43.3	5.7	15.2%	
Apr-20	41.8	50.2	8.4	20.1%	
May-20	46.0				53.0
Jun-20	50.0				55.0
Acceptable Variance			± 15%		10.0%



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

1. NARRATIVE / BACKGROUND

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

2. CRITERIA

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

3. ACHIEVEMENTS

- Through the month of April, Distribution Construction & Maintenance completed 50.2 circuit-miles. The key performance goal is 50 circuit-miles for Fiscal Year 19/20.

4. PERFORMANCE/VARIANCE ANALYSIS & YEAR END PROJECTION

- Variance through the month of April is 8.4 circuit-miles, 20% above target. This is due to District crews closing the completed jobs in the system.

5. MITIGATION/RECOMMENDATION

- Ahead of schedule, no mitigation plan at this point.

6. OUTREACH STRATEGY / PLAN

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

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

RESPONSIBLE MANAGER: Walter Rodriguez, Power Transmission and Distribution

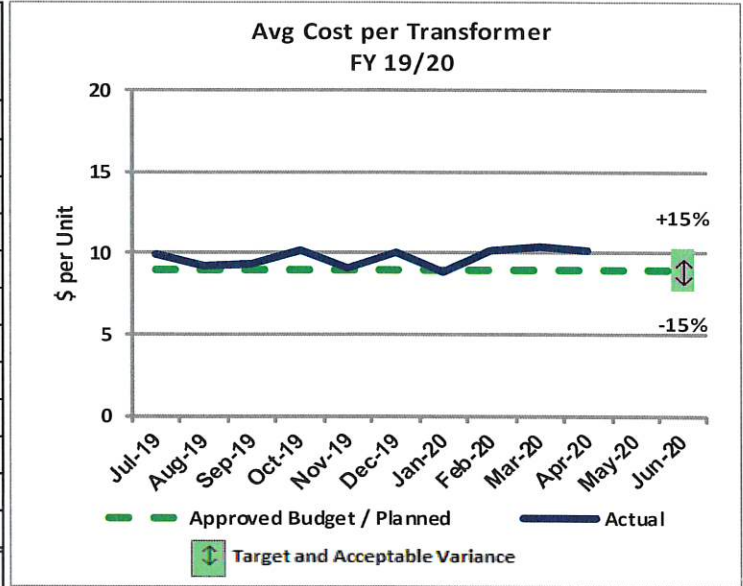
REPORTING PERIOD: April 2020

DEFINITION OF RATES METRIC: Average Unit Cost per Transformer

TARGET & ACCEPTABLE VARIANCE (FY 19/20): Target = \$9.0K per transformer: Acceptable Variance = ± 15%

STATUS: Within Acceptable Variance

FYTD as of:	Approved Budget / Planned	Actual	Variance		Re-Estimate (If Applicable)
			Unit or \$	%	
Jul-19	9.0	9.9	0.9	10.0%	
Aug-19	9.0	9.2	0.2	2.2%	
Sep-19	9.0	9.3	0.3	3.3%	
Oct-19	9.0	10.2	1.2	13.3%	
Nov-19	9.0	9.1	0.1	1.1%	
Dec-19	9.0	10	1.0	11.1%	
Jan-20	9.0	8.8	(0.2)	-2.2%	
Feb-20	9.0	10.2	1.2	13.3%	
Mar-20	9.0	10.4	1.4	15.6%	
Apr-20	9.0	10.2	1.2	13.3%	
May-20	9.0				9.0
Jun-20	9.0				9.0
Acceptable Variance			± 15%		0.0%



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

1. BACKGROUND / PURPOSE

- Identify and replace 850 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 \$9.0K per unit.

2. ACHIEVEMENTS / MILESTONES MET

- As of April 30, the target was to replace 708 transformers at 83% of the FY goal. PTD has completed replacement of 643 transformers, which is 76% of the fiscal year goal with a current average cost of \$10.2 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.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

- Power New Business Development and Technical Application (PNBDTA) business group continues to make advancements on a strategic goal to improve Work Management Information System (WMIS) mapping of Accelerated Code (AC) jobs. Improvements have been implemented and a slight reduction of unit replacement cost is noticeable.
- PTD has been working with PNBDTA on refining the mapping of AC jobs and providing the most accurate cost per unit.
- PTD is continuing to monitor and provide recommendations as needed.

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

RESPONSIBLE MANAGER: *Walter Rodriguez* Power Transmission and Distribution

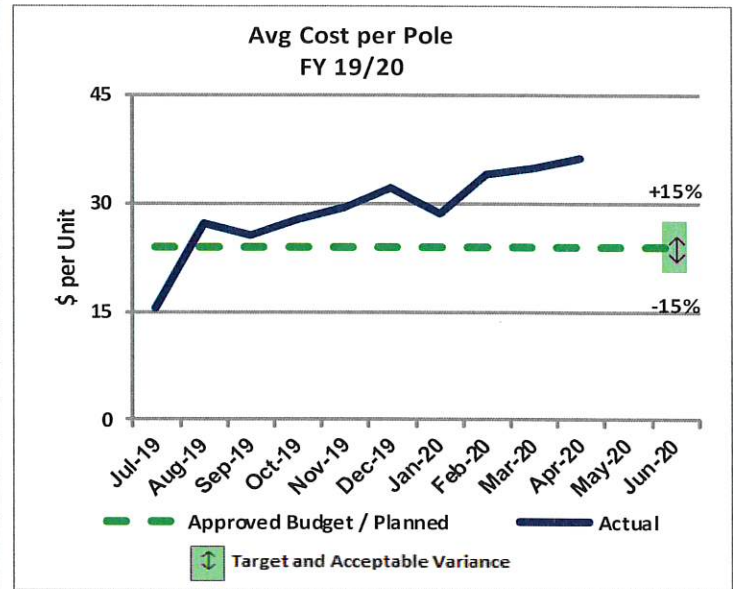
REPORTING PERIOD: April 2020

DEFINITION OF RATES METRIC: Average Unit Cost per Pole

TARGET & ACCEPTABLE VARIANCE (FY 19/20): Target = \$24.0K per pole: Acceptable Variance = ± 15%

STATUS: **Outside Acceptable Variance**

FYTD as of:	Approved Budget / Planned	Actual	Variance		Re-Estimate (If Applicable)
			Unit or \$	%	
Jul-19	24.0	15.4	(8.6)	-35.8%	
Aug-19	24.0	27.2	3.2	13.3%	
Sep-19	24.0	25.4	1.4	5.8%	
Oct-19	24.0	27.8	3.8	15.8%	
Nov-19	24.0	29.4	5.4	22.5%	
Dec-19	24.0	32.1	8.1	33.8%	
Jan-20	24.0	28.6	4.6	19.2%	
Feb-20	24.0	34	10.0	41.7%	
Mar-20	24.0	34.7	10.7	44.6%	
Apr-20	24.0	36.2	12.2	50.8%	
May-20	24.0				24.0
Jun-20	24.0				24.0
Acceptable Variance			± 15%		0.0%



SOURCE OF DATA: Jobs P6322 (KPI # 04.01.01.72)

1. BACKGROUND / PURPOSE

- Replace 4,000 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 \$24K per unit.

2. ACHIEVEMENTS / MILESTONES MET

- As of April 30, our current to date target was a replacement of 3,333 power poles at 83% of the FY goal. PTD has completed replacement of 3,313 power poles, which is 83% of the FY goal with a current average cost of \$36.2K per unit.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- PTD and Contract Operations personnel are outside the acceptable variance for this month; although this job is currently behind the monthly goal it is still on track for meeting year end expectations for replacements.

- PTD continues to work with Work Management Information System (WMIS) administrators on refining and evaluating how pole replacement costs are captured and how the cost per unit is affected. WMIS is the system used to capture time and work orders from employees working on the pole replacements. The number of crews, the amount of employees on each crew, and how time is entered by each employee affects WMIS reporting, which consequently affects the cost per unit average, which is 50.8% above estimated unit cost on this Multi-Year Expenditure.
- The cost of the pole replacement is also affected by the complexity/ease of replacement, as well as location and other mitigating factors, such as the introduction of alternative poles. These poles are more of a hazard when installing and extra precautionary measures are needed which affects the amount of poles that can be replaced in the month.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

- PTD will continue to monitor and audit unit costs as we work with Power New Business Development and Technical Application (PNBDTA) to refine accounting for these jobs.

Within Acceptable Variance Outside Acceptable Variance Exceeds Target Needs Attention

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

RESPONSIBLE MANAGER: Walter Rodriguez, Power Transmission and Distribution

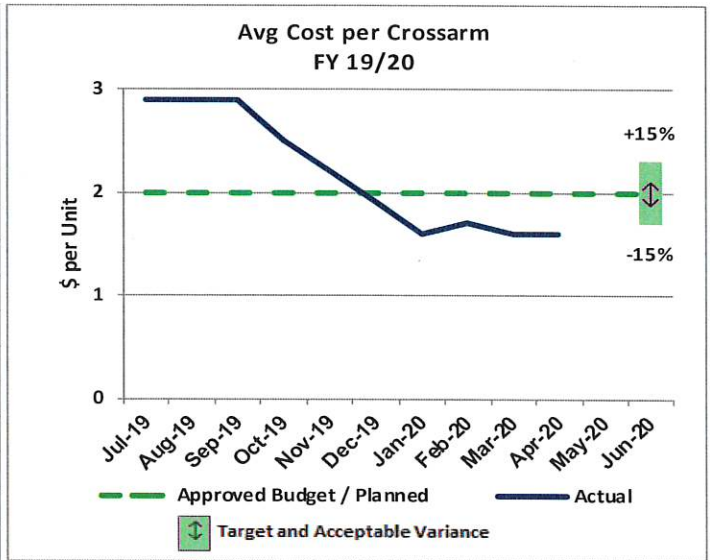
REPORTING PERIOD: April 2020

DEFINITION OF RATES METRIC: Average Unit Cost per Crossarms

TARGET & ACCEPTABLE VARIANCE (FY 19/20): Target = \$2.0K per crossarm: Acceptable Variance = ± 15%

STATUS: Exceeds Target

FYTD as of:	Approved Budget / Planned	Actual	Variance		Re-Estimate (If Applicable)
			Unit or \$	%	
Jul-19	2.0	2.9	0.9	45.0%	
Aug-19	2.0	2.9	0.9	45.0%	
Sep-19	2.0	2.9	0.9	45.0%	
Oct-19	2.0	2.5	0.5	25.0%	
Nov-19	2.0	2.2	0.2	10.0%	
Dec-19	2.0	1.9	(0.1)	-5.0%	
Jan-20	2.0	1.6	(0.4)	-20.0%	
Feb-20	2.0	1.7	(0.3)	-15.0%	
Mar-20	2.0	1.6	(0.4)	-20.0%	
Apr-20	2.0	1.6	(0.4)	-20.0%	
May-20	2.0				2.0
Jun-20	2.0				2.0
Acceptable Variance			± 15%		0.0%



SOURCE OF DATA: Jobs P6318 (KPI # 04.01.01.73)

1. BACKGROUND / PURPOSE

- Replace 10,000 deteriorated crossarms due to age or other damage. Power Transmission and Distribution (PTD) maintains approximately 321,000 poles that usually support one or more crossarms. These crossarms support conductors at different voltage levels, transformers, switches, light fixtures, communication cables, etc. PTD has a target replacement cost of \$2.0K per unit.

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

2. ACHIEVEMENTS / MILESTONES MET

- As of April 30, our current to date target was to replace 8,290 crossarms which is 83% of the FY goal. PTD has completed the replacement of 9,006 crossarms, which is 90% of the FY goal, with a current average cost of \$1.6K per unit.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

- PTD will continue to monitor and work with Power New Business Development and Technical Application business group on the Work Management Information System (WMIS) mapping of work requests targeting this job.
- PTD will monitor and ensure efficient work practices and proper capturing of costs to ensure that all costs are being captured correctly.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- PTD is currently exceeding the acceptable variance of \$2.0K per unit. For the month of April, the average cost is \$1.6K, which is 20% under the target. Crossarm replacement costs will fluctuate depending on the difficulty factor of

Within Acceptable Variance Outside Acceptable Variance Exceeds Target Needs Attention

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

New R

RESPONSIBLE MANAGER: Walter Rodriguez, Power Transmission and Distribution

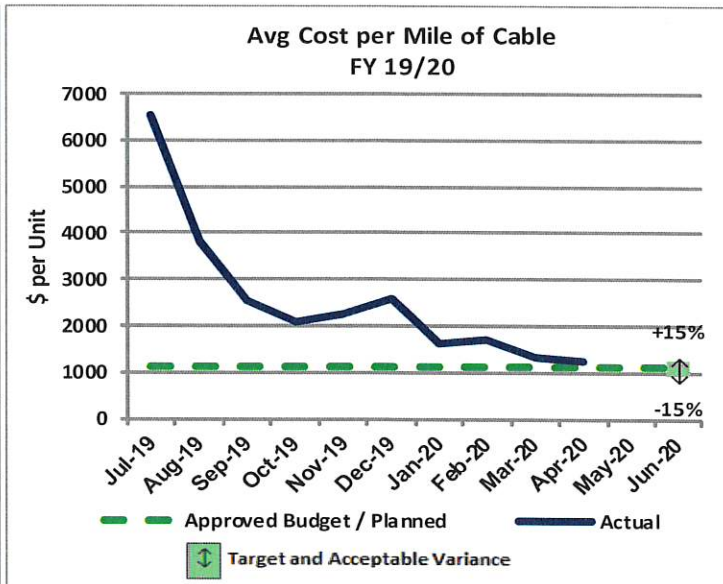
REPORTING PERIOD: April 2020

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

TARGET & ACCEPTABLE VARIANCE (FY 19/20): Target = \$1100.0K per mile of cable replaced; ; Acceptable Variance = ± 15%

STATUS: Within Acceptable Variance

FYTD as of:	Approved Budget / Planned	Actual	Variance		Re-Estimate (If Applicable)
			Unit or \$	%	
Jul-19	1100.0	6536.8	5436.8	494.3%	
Aug-19	1100.0	3802.8	2702.8	245.7%	
Sep-19	1100.0	2538.9	1438.9	130.8%	
Oct-19	1100.0	2092.6	992.6	90.2%	
Nov-19	1100.0	2259.5	1159.5	105.4%	
Dec-19	1100.0	2583.7	1483.7	134.9%	
Jan-20	1100.0	1614.8	514.8	46.8%	
Feb-20	1100.0	1711.1	611.1	55.6%	
Mar-20	1100.0	1346.3	246.3	22.4%	
Apr-20	1100.0	1256.2	156.2	14.2%	
May-20	1100.0				1100.0
Jun-20	1100.0				1100.0
Acceptable Variance			± 15%	0.0%	



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 \$1100.0K per mile.

2. ACHIEVEMENTS / MILESTONES MET

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

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- Average cost per mile of cable is 14.2% which is within the acceptable target for the month of April.
- Due to Bureau of Engineering street restrictions, which will continue past fiscal year-end, much of the construction has been conducted after hours, on weekends, or round the clock adding to the labor cost per Memorandum of Understanding guidelines.

- Since actual cable replacement mileage is only accounted for upon the completion of task 145 in Work Management Information System (WMIS) while labor is accounted for daily and materials are accounted for through Supply Chain entries after the completion of Requests Material Services (RMS), the variances may fluctuate greatly with total cost taking several weeks or months to come in line.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

- PTD will continue to monitor job performance and ensure that time, materials, and labor are being accounted for accurately and appropriately.
- PTD will continue to work with Power New Business Development and Technical Application business group to ensure all work and costs are accounted for with the highest accuracy possible.

Water System

LADWP RATES METRIC – NEW DISTRIBUTION INFRASTRUCTURE CREWS (WATER)

RESPONSIBLE MANAGER: Breonia Lindsey/Sandra Foster

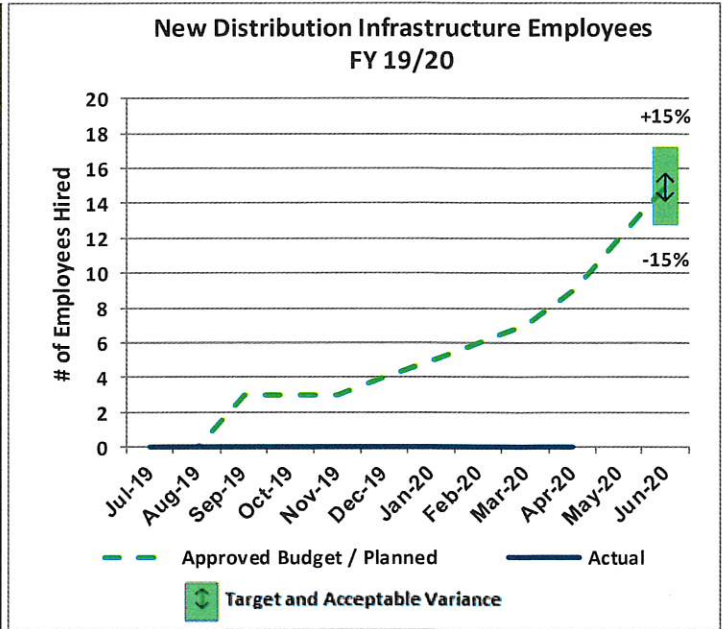
REPORTING PERIOD: April 2020

DEFINITION OF RATES METRIC: Number of employees for new crews dedicated to distribution infrastructure as compared to plan.

TARGET & ACCEPTABLE VARIANCE (FY 19/20): 15 employees, ±15%

STATUS: Outside Acceptable Variance

FYTD as of:	Approved Budget / Planned	Actual	Variance		Re-Estimate (If Applicable)
			# Emp	%	
Jul-19	0	0	0	0.0%	
Aug-19	0	0	0	0.0%	
Sep-19	3	0	-3	-100.0%	
Oct-19	3	0	-3	-100.0%	
Nov-19	3	0	-3	-100.0%	
Dec-19	4	0	-4	-100.0%	
Jan-20	5	0	-5	-100.0%	
Feb-20	6	0	-6	-100.0%	
Mar-20	7	0	-7	-100.0%	
Apr-20	9	0	-9	-100.0%	
May-20	12				0
Jun-20	15				0
Acceptable Variance			± 15%		-100.0%



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 two crews totaling 15 employees dedicated for infrastructure replacement.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- Current rate of hiring new positions is outside the acceptable variance. The Division does not anticipate meeting the 2019/2020 goal. Due to the Covid-19 pandemic hiring was suspended on March 16, 2020. Previously the Division was continuously hiring; however, due to internal transfers, promotions, and attrition, the new positions being filled are performing work in existing critical infrastructure crews. Thus the Division has not been able to net additional employees.

2. ACHIEVEMENTS/MILESTONES MET

- The Division has hired 94 infrastructure employees in fiscal year 2019/2020 filling existing vacancies in the infrastructure crews. Once hiring resumes the Division will backfill critical infrastructure positions. This fiscal year the Division has been unable to net any new employees due to attrition and internal promotions.

4. MITIGATION PLAN AND/OR RECOMMENDATIONS

- Once hiring resumes, the Division will ramp up its hiring efforts to meet its future mainline replacement goal.

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

RESPONSIBLE MANAGER: April Thang *[Signature]*

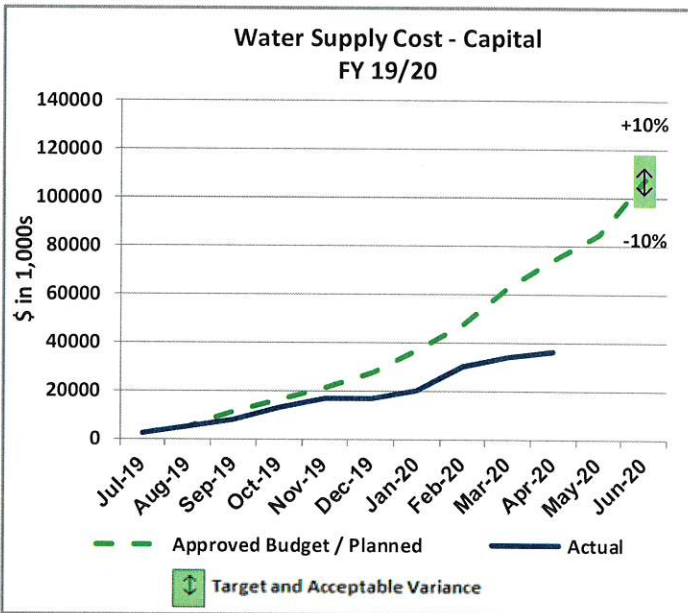
REPORTING PERIOD: April 2020

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

TARGET & ACCEPTABLE VARIANCE (FY 19/20): \$107,356K , 10 percent

STATUS: Outside Acceptable Variance

FYTD as of:	Approved Budget / Planned	Actual	Variance		Re-Estimate (If Applicable)
			Unit or \$	%	
Jul-19	2,393	2,392	-1	0.0%	
Aug-19	5,274	5,167	-107	-2.0%	
Sep-19	11,469	8,145	-3,324	-29.0%	
Oct-19	16,066	13,087	-2,979	-18.5%	
Nov-19	21,402	17,013	-4,389	-20.5%	
Dec-19	27,512	16,723	-10,789	-39.2%	
Jan-20	36,857	20,334	-16,523	-44.8%	
Feb-20	47,340	30,225	-17,115	-36.2%	
Mar-20	62,886	34,086	-28,800	-45.8%	
Apr-20	74,146	36,563	-37,583	-50.7%	
May-20	84,892				50,200
Jun-20	107,356				63,836
Acceptable Variance			± 10%		-40.5%



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

1. BACKGROUND / PURPOSE

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

- In September 2019, resumed 6 million gallons per day (MGD) deliveries to the Dominguez Gap Barrier from the Terminal Island Water Reclamation Plant after LA Sanitation & Environment (LASAN) completed improvements and testing.
- In November 2019, the ozone treatment container for the Ozone Demonstration was delivered at Donald C. Tillman Water Reclamation Plant, which is a major component of the Initial Phase of the Los Angeles Groundwater Replenishment Project that will spread up to 3,500 AFY of the 30,000 AFY total project goals.

2. ACHIEVEMENTS / MILESTONES MET

- 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.
- In December 2019, executed recycled water service agreements with two customers: Seabluff at Playa Vista and West Basin Municipal Water District for the pumping station at Hyperion Water Reclamation Plant.

- In February 2020, LADWP provided reimbursement checks totaling \$239,004 to the first two recycled water customers to take part in LADWP's Recycled Water Customer Capital Incentive Program.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- Several water recycling, groundwater management, and watershed stormwater capture projects have been cancelled or deferred due to changes in scope of work, further evaluation of projects, and lack of design resources.
 - The San Fernando Park Project was postponed as the Department awaits official notice of the funding that will be provided by the City of San Fernando's Measure W and Prop 1 Grant funds. LADWP would complement funding shortfall depending on the grant funds.
 - The Tujunga Spreading Ground Project is nearing completion and only the contingency funds remain.
 - The LA Groundwater Development Program Feasibility Study of Constructing New Wells project schedule has been revised; thus, the initial land acquisition did not occur this fiscal year.
- The demand for residential and commercial Water Conservation rebates has decreased. The budget has been re-estimated.
- Capital work on the Los Angeles Aqueduct was delayed due to the larger than expected runoff the first half of this year. Work was expected to pick up the last three months of the fiscal year. However, work will be delayed due to reduction in staff due to COVID-19.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

- The Water System will continue monitoring the costs. Budget re-estimates will be made as needed.
- Continue work on the San Fernando Regional Park and Stormwater Capture Parks Programs.
- Work on increasing outreach and visibility to rebate program customers in order to increase utilization and participation in the programs being offered currently and in the future.

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

RESPONSIBLE MANAGER: April Thang *[Signature]*

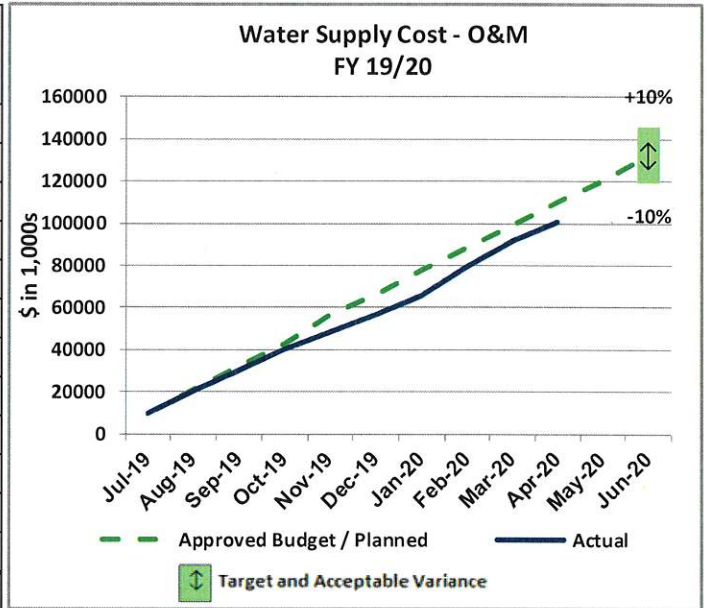
REPORTING PERIOD: April 2020

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

TARGET & ACCEPTABLE VARIANCE (FY 19/20): \$132,552K , 10 percent

STATUS: Within Acceptable Variance

FYTD as of:	Approved Budget / Planned	Actual	Variance		Re-Estimate (If Applicable)
			Unit or \$	%	
Jul-19	9,784	9,784		0.0%	
Aug-19	21,189	20,350		-4.0%	
Sep-19	32,053	30,269		-5.6%	
Oct-19	42,923	40,015		-6.8%	
Nov-19	56,763	48,227		-15.0%	
Dec-19	66,289	56,777		-14.3%	
Jan-20	77,967	65,595		-15.9%	
Feb-20	88,537	79,694		-10.0%	
Mar-20	99,237	91,507		-7.8%	
Apr-20	109,937	100,373		-8.7%	
May-20	120,637				
Jun-20	132,552				
Acceptable Variance			± 10%		



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

1. BACKGROUND / PURPOSE

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

2. ACHIEVEMENTS / MILESTONES MET

- Completed 274 preventative maintenance tasks for 96 pump station facilities and 602 regulatory bi-weekly maintenance on 45 emergency backup IC Engine units located throughout the Water System.
- There have been six complete retro fits at both the Valley and Metro Pressure Regulating Stations.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- On target.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

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

LADWP RATES METRIC – Purchased Water (Water)

RESPONSIBLE MANAGER: April Thang 

REPORTING PERIOD: April 2020

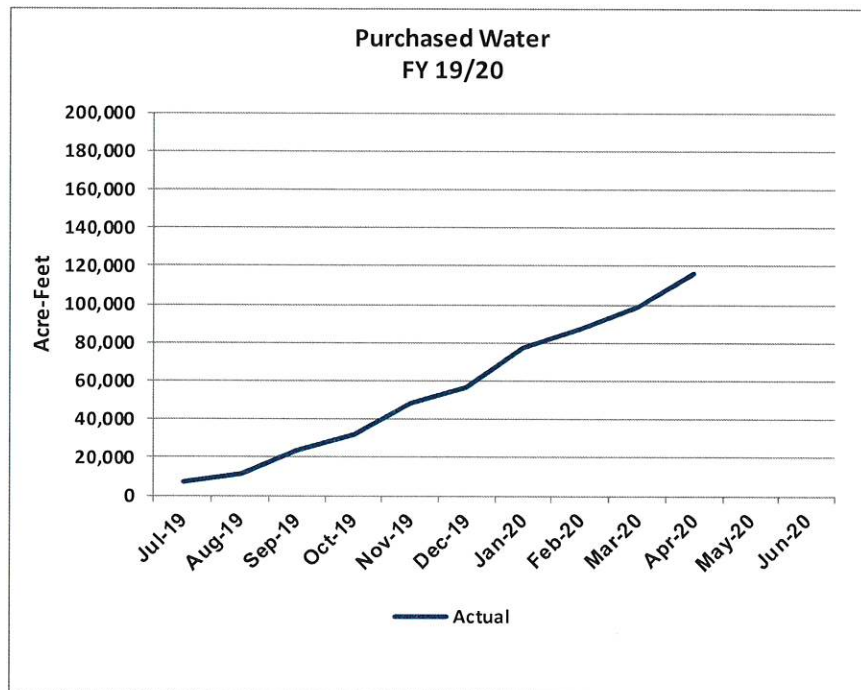
DEFINITION OF RATES METRIC: Annual quantity of purchased water in acre-feet (AF). Information only.

TARGET & ACCEPTABLE VARIANCE (FY 19/20): N/A - for information only

STATUS:

Information Only

FYTD as of:	Actual
Jul-19	7,087
Aug-19	11,506
Sep-19	23,254
Oct-19	32,327
Nov-19	48,504
Dec-19	56,313
Jan-20	77,287
Feb-20	87,362
Mar-20	98,924
Apr-20	116,485
May-20	
Jun-20	



SOURCE OF DATA: Monthly Metropolitan Water District invoices.

1. BACKGROUND / PURPOSE

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

2. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

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

3. MITIGATION PLAN AND / OR RECOMMENDATIONS

- 20% conservation has reduced the overall water use, minimizing purchased water.
- As of March 31, 2020, the combined average of LADWP's Eastern Sierra snow courses was 58 percent of normal with water content measuring 13.3 inches.
- There were two weeks of additional snowfall after the March snow surveys, and the remote-monitored snow pillows indicated an additional five inches of water content fell, giving us a final snowpack of approximately 80% of normal.

LADWP RATES METRIC – RECYCLED WATER DELIVERED (Water)

RESPONSIBLE MANAGER: Gregory R. Reed

REPORTING PERIOD: April 2020

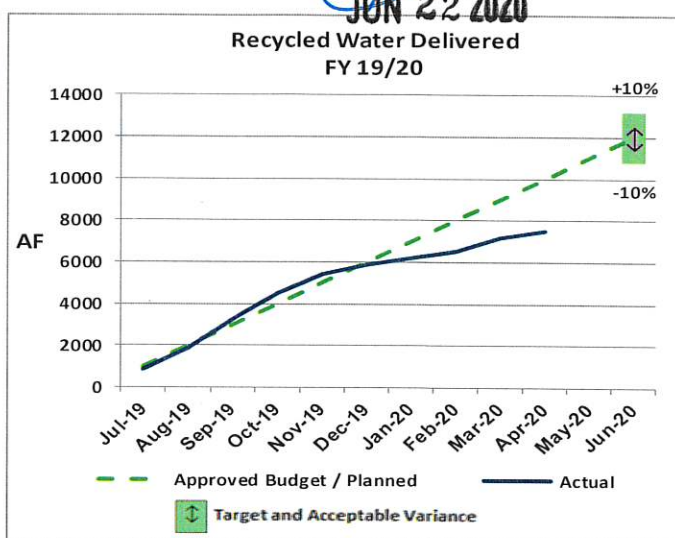
DEFINITION OF RATES METRIC: Annual quantity of recycled water delivered in acre-feet (AF) against plan.

TARGET & ACCEPTABLE VARIANCE (Fiscal Year FY 19/20): 12,000 AF, 10%

GREGORY REED

STATUS: Outside Acceptable Variance

FYTD as of	Approved Budget / Planned	Actual	Variance		Re-Estimate (If Applicable)
			AF	%	
Jul-19	1,000	841	-159	-15.9%	
Aug-19	2,000	1,900	-100	-5.0%	
Sep-19	3,000	3,248	248	8.3%	
Oct-19	4,000	4,499	499	12.5%	
Nov-19	5,000	5,401	401	8.0%	
Dec-19	6,000	5,877	-123	-2.1%	
Jan-20	7,000	6,163	-837	-12.0%	
Feb-20	8,000	6,534	-1466	-18.3%	
Mar-20	9,000	7,154	-1846	-20.5%	
Apr-20	10,000	7,487	-2513	-25.1%	
May-20	11,000				8,000
Jun-20	12,000				9,000
Acceptable Variance			± 10%		-25.0%



SOURCE OF DATA: Customer Recycled Water Meter Reads

1. BACKGROUND / PURPOSE

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

2. ACHIEVEMENTS / MILESTONES MET

- Delivered 7,487 AF of recycled water, which is approximately 25.1% below the planned goal for FY 19-20.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- Water delivery in the Harbor area was affected by construction on the recycled water pipe. Water delivery to Dominguez Gap barrier was interrupted for 6 weeks so that the Machado Lake Pipeline Project Construction crews could connect into the existing Harbor pipeline (end of January - beginning of February).
- COVID-19 closures and limited access to recycled water facilities affected recycled water usage in March and April.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

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

LADWP RATES METRIC – STORMWATER CAPACITY (Water)

RESPONSIBLE MANAGER: David Pettijohn *[Signature]*

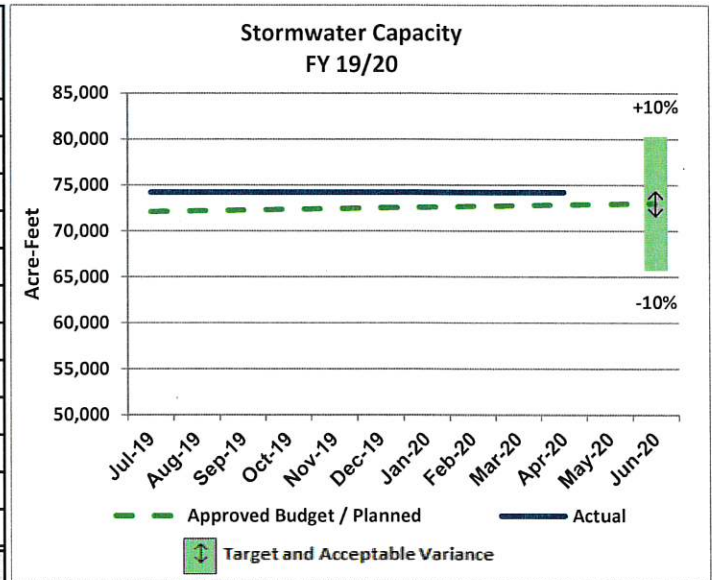
REPORTING PERIOD: April 2020

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

TARGET & ACCEPTABLE VARIANCE (FY 19/20): 73,000 AFY; 10% variance

STATUS: Within Acceptable Variance

FYTD as of:	Approved Budget / Planned	Actual	Variance		Re-Estimate (If Applicable)
			Unit or \$	%	
Jul-19	72,084	74,177	2,093	2.9%	
Aug-19	72,168	74,177	2,009	2.8%	
Sep-19	72,252	74,177	1,925	2.7%	
Oct-19	72,336	74,177	1,841	2.5%	
Nov-19	72,420	74,177	1,757	2.4%	
Dec-19	72,504	74,177	1,673	2.3%	
Jan-20	72,588	74,177	1,589	2.2%	
Feb-20	72,673	74,177	1,504	2.1%	
Mar-20	72,756	74,177	1,421	2.0%	
Apr-20	72,840	74,177	1,337	1.8%	
May-20	72,924				
Jun-20	73,000				
Acceptable Variance			± 10%		



SOURCE OF DATA: Summary of Major Stormwater Capture Projects Report

1. BACKGROUND / PURPOSE

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

2. ACHIEVEMENTS / MILESTONES MET

- Projects in construction include:
 - Tujunga Spreading Grounds (8,000 AFY) is 79% complete.
 - Bradley Green Alley (6 AFY) is 90% complete.
 - Lankershim Boulevard Great Street (51 AFY) 40% complete.
- Projects in Design/Planning include:
 - Silver Lake Reservoir Stormwater Capture Project (63 AFY), 30% design in progress.

- San Fernando Valley Distributed Stormwater Capture Projects: Victory Goodland Median Stormwater Capture Project (97 AFY), Glenoaks & Filmore Stormwater Capture Project (86 AFY), Agnes Avenue Stormwater Capture Project (60 AFY), 30% design in progress.
- Whitnall Highway Stormwater Capture Project (270 AFY), 30% design in progress.
- San Fernando Regional Park Stormwater Capture Project (200 AFY) design is substantially complete, construction expected to start mid-2020.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- On target.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

- Continue ongoing work as planned.

Within Acceptable Variance
Outside Acceptable Variance
Exceeds Target
Needs Attention

LADWP RATES METRIC – ANNUAL GROUNDWATER PRODUCTION



CENTRAL BASIN (Water)

RESPONSIBLE MANAGER: Evelyn Cortez-Davis

REPORTING PERIOD: April 2020

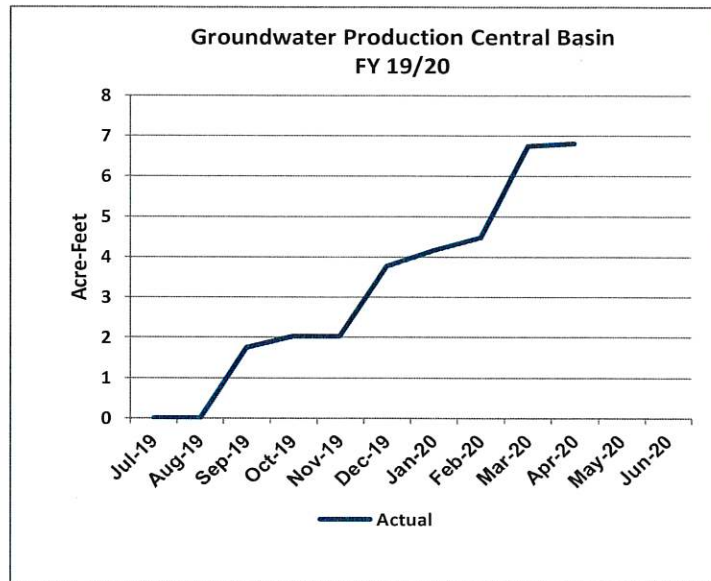
DEFINITION OF RATES METRIC: Annual groundwater production in the Central Basin in acre-feet (AF) against the plan. Information only

TARGET & ACCEPTABLE VARIANCE (FY19/20): N/A for information only.

STATUS:

Information Only

FYTD as of:	Actual
Jul-19	0.00
Aug-19	0.00
Sep-19	1.75 *
Oct-19	2.03 *
Nov-19	2.03 *
Dec-19	3.76
Jan-20	4.16
Feb-20	4.47
Mar-20	6.75
Apr-20	6.81
May-20	
Jun-20	



SOURCE DATA: Well Metered Reads

* Data was revised to reflect correct actuals

1. BACKGROUND / PURPOSE

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

- Although both wells are off, a small amount of flow has been used monthly, starting in September 2019, in order to hydro test the forebay as well as for sampling purposes.

3. MITIGATION PLAN AND / OR RECOMMENDATIONS

- The project to construct iron/manganese filtration removal systems for the 99th St Well Field is in the design phase. It's about 90% completed. The anticipated in-service date is FY20/21.
- Manhattan Wells Improvement Project to install monitoring and production wells is in the commissioning phase. Due to COVID-19 event, this project has been put on hold.

2. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

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

Within Acceptable Variance



Outside Acceptable Variance



Exceeds Target



Needs Attention



LADWP RATES METRIC – ANNUAL GROUNDWATER PRODUCTION

SAN FERNANDO (Water)

ECD

RESPONSIBLE MANAGER: Evelyn Cortez-Davis

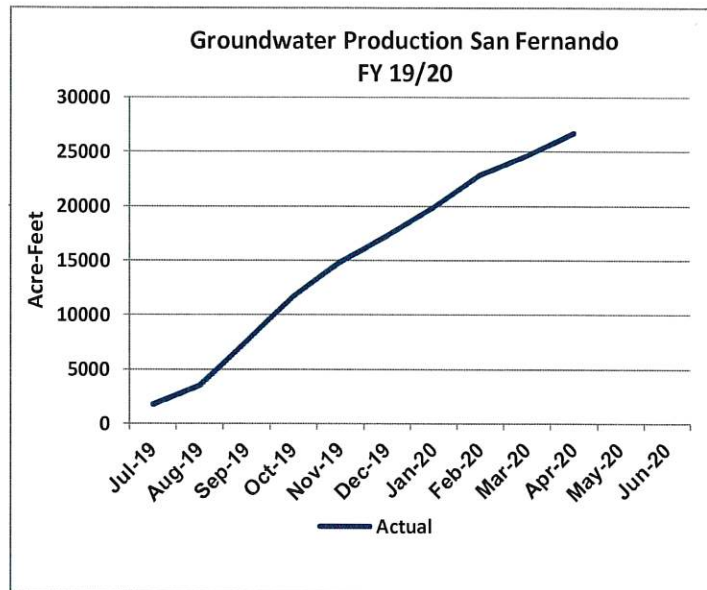
REPORTING PERIOD: April 2020

DEFINITION OF RATES METRIC: Annual groundwater production in the San Fernando in acre-feet (AF) against the plan. Information only.

TARGET & ACCEPTABLE VARIANCE (FY 19/20): N/A for information only.

STATUS: Information Only

FYTD as of:	Actual
Jul-19	1,705
Aug-19	3,468
Sep-19	7,521
Oct-19	11,700
Nov-19	14,799
Dec-19	17,221
Jan-20	19,876
Feb-20	22,853
Mar-20	24,624
Apr-20	26,706
May-20	
Jun-20	



SOURCE OF DATA: Well Metered Reads

1. BACKGROUND / PURPOSE

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

2. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- As of February 2019, groundwater well production was reduced due to abundant Los Angeles Aqueduct supply to the City as well as operational needs.

3. MITIGATION PLAN AND / OR RECOMMENDATIONS

- Local groundwater water is used conjunctively with lower cost Los Angeles Aqueduct water and can be stored for future use.

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

RESPONSIBLE MANAGER: Darin Willey



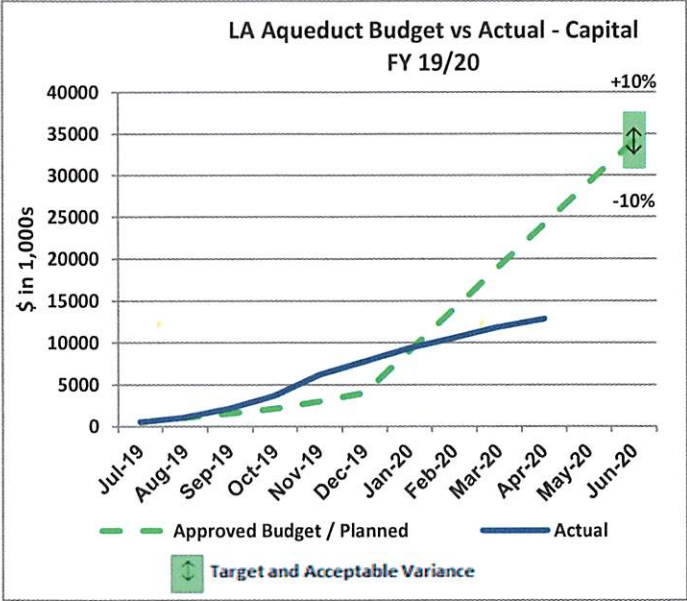
REPORTING PERIOD: April 2020

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

TARGET & ACCEPTABLE VARIANCE (FY 19/20): \$34,176K , 10 percent

STATUS: Outside Acceptable Variance

FYTD as of:	Approved Budget / Planned	Actual	Variance		Re-Estimate (If Applicable)
			\$	%	
Jul-19	507	507	0	0.0%	
Aug-19	1,057	1,057	0	0.0%	
Sep-19	1,557	2,139	582	37.4%	
Oct-19	2,100	3,676	1,576	75.0%	
Nov-19	3,000	6,181	3181	106.0%	
Dec-19	4,000	7,744	3744	93.6%	
Jan-20	9,029	9,359	330	3.7%	
Feb-20	14,058	10,556	-3502	-24.9%	
Mar-20	19,087	11,843	-7244	-38.0%	
Apr-20	24,117	12,799	-11318	-46.9%	
May-20	29,173				14,443
Jun-20	34,176				15,743
Acceptable Variance			± 10%		-53.9%



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

1. BACKGROUND / PURPOSE

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

2. ACHIEVEMENTS / MILESTONES MET

- The Rawson Canal project was completed in October 2019. This emergency capital project replaced a collapsed culvert in the City of Bishop in the public right-of-way.
- The Indian Wells Cathodic Protection project was completed in October 2019. This project consisted of installation of sacrificial anodes to protect the steel portion of the Aqueduct that runs through the Indian Wells area.
- Cain Ranch improvements and security fencing project is in progress, with an estimated completion date of September 2020.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- The Grant Lake Spillway project and the 2nd Los Angeles Aqueduct and State Water Project Intertie budget were deferred.
- Pending further developments, capital expenditures are expected to be significantly below budgeted levels at the end of the fiscal year.
- COVID-19 has severely hampered efforts to complete capital projects where crews work closely together.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

- The budget has been re-estimated; however, capital expenditures will still leave this item below budgeted levels at fiscal year-end.

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

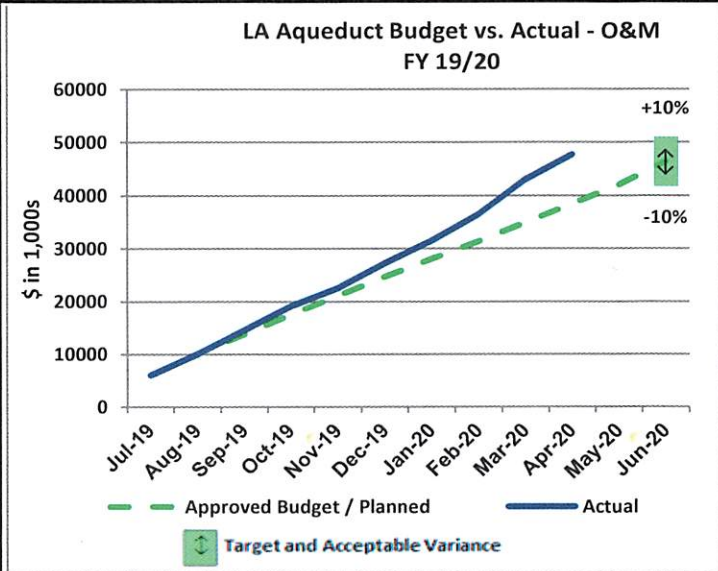
 RESPONSIBLE MANAGER: Darin Willey *Darin Willey*

REPORTING PERIOD: April 2020

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

TARGET & ACCEPTABLE VARIANCE (FY 19/20): \$46,341K , 10 percent

FYTD as of:	Approved Budget / Planned	Actual	Variance		Re-Estimate (If Applicable)
			\$	%	
Jul-19	5,947	5,947	0	0.0%	
Aug-19	10,016	9,953	-63	-0.6%	
Sep-19	13,715	14,452	737	5.4%	
Oct-19	17,420	19,025	1,605	9.2%	
Nov-19	21,030	22,503	1,474	7.0%	
Dec-19	24,654	27,197	2,543	10.3%	
Jan-20	27,999	31,453	3,454	12.3%	
Feb-20	31,404	36,511	5,107	16.3%	
Mar-20	34,939	42,948	8,009	22.9%	
Apr-20	38,474	47,680	9,206	23.9%	
May-20	42,009				52,680
Jun-20	46,341				57,680
Acceptable Variance			± 10%		24.5%



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

- Maintenance at the beginning of the fiscal year was performed to manage a heavier than expected run-off. After the run-off emergency was over, Aqueduct crews prepared for dam inspections and performed delayed maintenance.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- O&M expenditures are above target and anticipated budgeted levels. Expenditures in the first quarter of the fiscal year were slightly higher due to the large snow pack. Expenditures were expected to taper off to be near budgeted levels at fiscal year-end, as emphasis was to be placed on Capital projects in the 2nd half of the fiscal year, however, COVID-19 has severely hampered efforts to complete Capital projects where crews work closely together.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

- Continue to monitor expenditures. O&M is expected to be significantly over budget, however, Capital and O&M combined will be within an acceptable variance range.

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

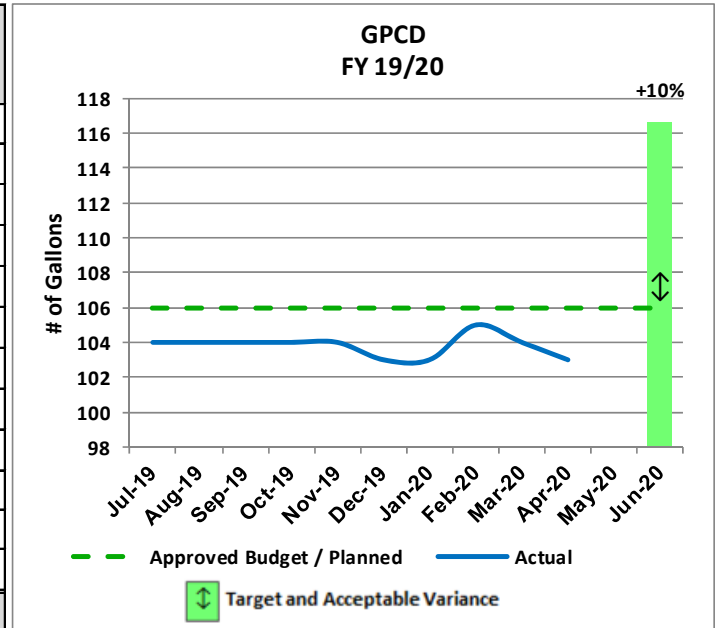
RESPONSIBLE MANAGER: Terrence McCarthy

REPORTING PERIOD: April 2020

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

TARGET & ACCEPTABLE VARIANCE (FY 19/20): 106 GPCD & 10% Acceptable Variance

FYTD as of:	Approved Budget / Planned	Actual	Variance		Re-Estimate of Budget/Planned
			GPCD	%	
Jul-19	106	104	-2	-1.9%	
Aug-19	106	104	-2	-1.9%	
Sep-19	106	104	-2	-1.9%	
Oct-19	106	104	-2	-1.9%	
Nov-19	106	104	-2	-1.9%	
Dec-19	106	103	-3	-2.8%	
Jan-20	106	103	-3	-2.8%	
Feb-20	106	105	-1	-0.9%	
Mar-20	106	104	-2	-1.9%	
Apr-20	106	103	-3	-2.8%	
May-20	106				
Jun-20	106				
Acceptable Variance			± 10%		



SOURCE OF DATA: Water Operations Monthly Supply Tracking

1. BACKGROUND / PURPOSE

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

- 12-month rolling GPCD is anticipated to remain the same or marginally change due to the sector shift in water use.

2. ACHIEVEMENTS / MILESTONES MET

- On January 1, 2017, LADWP met the pLAn goal of 20 percent reduction in GPCD and is currently sustaining this milestone.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

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

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- Customer water per capita use has declined from February to April due to lower than normal precipitation observed in February and higher than normal observed in March and April.
- The effects of COVID-19 has caused many businesses to close resulting in a shift of water use from Commercial, Industrial and Institutional (CII) sector to the Residential sector. The Residential sector accounts for approximately two thirds of water use.

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

RESPONSIBLE MANAGER: April Thang 

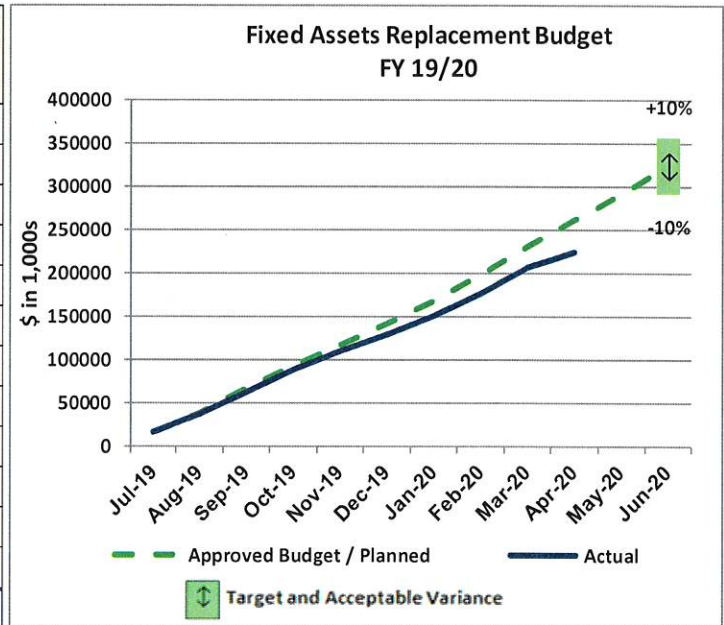
REPORTING PERIOD: April 2020

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

TARGET & ACCEPTABLE VARIANCE (FY 19/20): \$324,433K, 10 percent

STATUS: Needs Attention

FYTD as of:	Approved Budget / Planned	Actual	Variance		Re-Estimate (If Applicable)
			\$	%	
Jul-19	16,832	17,075	243	1.4%	
Aug-19	39,207	37,089	-2,118	-5.4%	
Sep-19	67,281	62,818	-4,463	-6.6%	
Oct-19	93,283	88,791	-4,492	-4.8%	
Nov-19	117,852	110,182	-7,670	-6.5%	
Dec-19	142,178	129,065	-13,113	-9.2%	
Jan-20	168,696	151,454	-17,242	-10.2%	
Feb-20	198,684	177,476	-21,208	-10.7%	
Mar-20	232,065	206,609	-25,456	-11.0%	
Apr-20	261,864	224,946	-36,918	-14.1%	
May-20	291,938				248,096
Jun-20	324,433				271,246
Acceptable Variance			± 10%		-16.4%



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

1. BACKGROUND / PURPOSE

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

2. ACHIEVEMENTS / MILESTONES MET

- As of April 2020, installed 132,287 feet of mainline.
- As of April 2020, installed 4,595 feet of the open trench portion of the 54-inch diameter steel pipe, Foothill TL Unit 3 Phase I and 3,907 feet of the open trench portion of 54-inch diameter earthquake resistant pipe Foothill TL Unit 3 Phase II.
- Elizabeth Tunnel Seismic Enhancement project 100% design has been pushed out by three months due to COVID-19 pandemic and is anticipated to be completed by September 2020.

- Grading of the Fairmont Reservoir has reached 95% milestone as of April 2020. It is anticipated to be completed by mid-June of 2020.
- Construction of a steel bridge over the Aqueduct was completed in January 2020. The concrete portion of each ramp and bridge work were completed in April. The bridge will be ready to carry the load of heavy equipment and construction vehicles into the Fairmont Reservoir site during the construction phase of the Elizabeth Tunnel Seismic Enhancement project, which is expected to start in early 2022.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- Fixed assets replacement was under budget for the reporting period due to delays in construction services as a result of permit cancellations on various Mainline Replacement Program projects. Additionally

Within Acceptable Variance Outside Acceptable Variance Exceeds Target Needs Attention

the Street Damage Restoration Fees (SDRF) are less than originally anticipated.

- The procurement for the Griffith Park Pump Station 115 skid system has experienced delays. In addition, workforce labor for Pump Station Minor A&B was directed to focus on maintenance activities in response to COVID-19 Pandemic event and hiring efforts have been on hold.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

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

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

RESPONSIBLE MANAGER: Gregory R. Reed

REPORTING PERIOD: April 2020

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

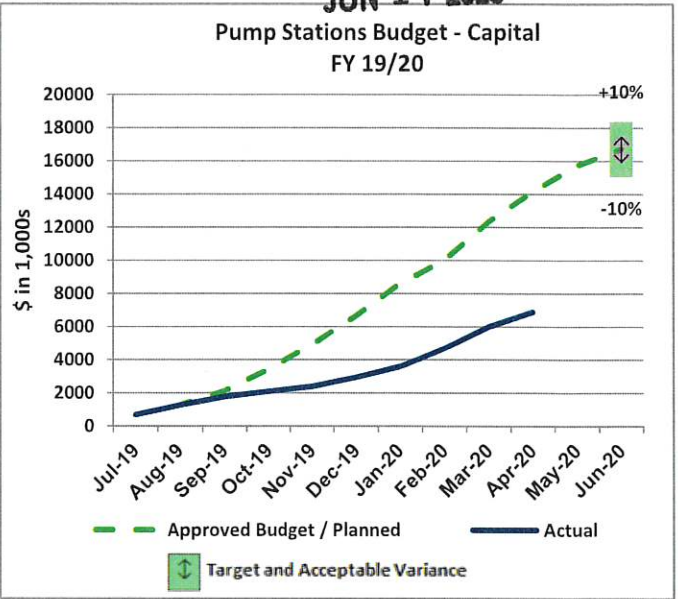
TARGET & ACCEPTABLE VARIANCE (FY 19/20): \$16.7M, 10 percent

GREGORY REED

STATUS: Outside Acceptable Variance

JUN 17 2020

FYTD as of:	Approved Budget / Planned	Actual	Variance		Re-Estimate (If Applicable)
			\$	%	
Jul-19	669	669	0	0.0%	
Aug-19	1,253	1,253	0	0.0%	
Sep-19	2,106	1,758	-348	-16.5%	
Oct-19	3,416	2,088	-1,328	-38.9%	
Nov-19	4,900	2,389	-2,511	-51.2%	
Dec-19	6,655	2,932	-3,723	-55.9%	
Jan-20	8,577	3,584	-4,993	-58.2%	
Feb-20	10,011	4,690	-5,321	-53.2%	
Mar-20	12,338	5,997	-6,341	-51.4%	
Apr-20	14,128	6,880	-7,248	-51.3%	
May-20	15,708				7,867
Jun-20	16,713				8,854
Acceptable Variance			± 10%		-47.0%



SOURCE OF DATA: FI 23220

1. BACKGROUND / PURPOSE

- The Pump Station program includes pump and motor replacement projects, pump station retrofit, and major upgrades/replacement of pump station facilities.
- FY19/20 goals include replacing twelve pumps and/or motors.
- Goals also include completing design of Redmont Pump Station, completing design and procurement of equipment for Griffith Park Pump Station No. 115, completing project planning of Van Norman Pump Station No.1, and starting planning of Garvanza Pump Station Building Replacement.

2. ACHIEVEMENTS / MILESTONES MET

- Through April 2020, seven pumps and/or motors have been replaced out of the twelve planned for the FY19/20.
- Victory Pump Station Project reached 30% Design in August 2019 and will resume design after the completion of the

Geotechnical Investigation and the property acquisition.

- Griffith Park Pump Station No. 115 reached 100% Design in July 2019 and the pump skid system is currently being procured.

3. PERFORMANCE / VARIANCE ANALYSIS AND YEAR-END PROJECTION

- The Redmont Pump Station schedule was delayed due to redesigning of the motors. Design is anticipated to be completed by May 2020.
- Expenditures on Victory Pump Station have been less than budgeted because of delays due to newly identified needs to have a full geotechnical investigation and to acquire property prior to design completion.
- Expenditures on Pump Station Minor A&B's purchase and installation have been under budget because R&C proposed staffing requirements have been delayed and their limited resources have been occupied supporting other Water System division projects.

- Delays with the procurement of equipment for the Griffith Park PS115 Project account for about \$1.5M of the variance.
- No pumps and/or motors have been replaced during the month of April due to very limited labor resources available as a result of COVID-19.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

- With Victory Pump Station design being on hold, the team will continue with the slope stability analysis, mainline American Iron and Steel requirement waiver, Earthquake Resistant Ductile Iron Pipe reservation, and Mitigated Negative Declaration documentation.
- R&C is moving forward on increasing staffing levels and committed to completing other Water System projects to focus on Water Operations projects, including A&B's.
- R&C is closely monitoring the procurement of the Skid Pumping system for Griffith Park PS115 to ensure delivery of the equipment and completion of project installation by early 2021.

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

RESPONSIBLE MANAGER: Gregory R. Reed

REPORTING PERIOD: April 2020

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

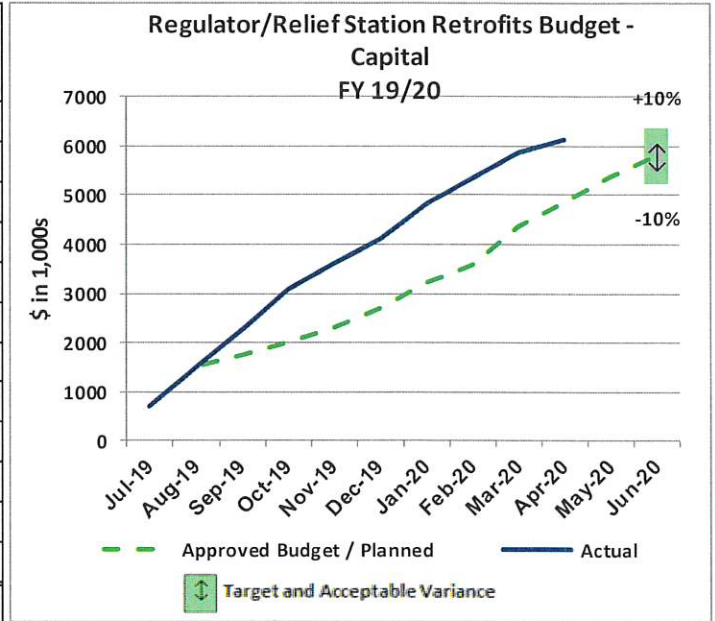
GREGORY REED

TARGET & ACCEPTABLE VARIANCE (FY 19/20): \$5.8M, 10 percent

STATUS: Exceeds Target

JUN 05 2020

FYTD as of:	Approved Budget / Planned	Actual	Variance		Re-Estimate (If Applicable)
			\$	%	
Jul-19	688	688	0	0.0%	
Aug-19	1,511	1,511	0	0.0%	
Sep-19	1,757	2,252	495	28.2%	
Oct-19	2,013	3,072	1,059	52.6%	
Nov-19	2,303	3,609	1,306	56.7%	
Dec-19	2,703	4,099	1,396	51.7%	
Jan-20	3,217	4,800	1,583	49.2%	
Feb-20	3,574	5,327	1,753	49.0%	
Mar-20	4,352	5,875	1,523	35.0%	
Apr-20	4,861	6,136	1,275	26.2%	
May-20	5,365				
Jun-20	5,795				
Acceptable Variance			± 10%		



SOURCE OF DATA: FI 24150

1. BACKGROUND / PURPOSE

- Regulator/relief stations are necessary to maintain reliable supply and pressure throughout the Water Distribution System.
- Regulator station retrofit goals for this fiscal year are to replace or rehabilitate eight regulator stations.

2. ACHIEVEMENTS / MILESTONES MET

- Through April 2020, nine regulator stations have been retrofitted.
- Planning began on the Sepulveda & Century Regulator Station Relocation Project as of September 2019.

3. PERFORMANCE / VARIANCE ANALYSIS AND YEAR-END PROJECTION

- A second regulator station retrofit crew was added due to more effort being required on A&B's projects and Repairs and Construction (R&C) work to rebuild, retrofit or replace equipment. The anticipated regulator station retrofit work is expected to

exceed the fiscal year replacement or rehabilitate goals.

- A large valve on the Van Ness & 3rd Regulator Station retrofit was found broken and required additional work that was not originally included. The retrofit work was completed in July 2019.
- No retrofits were completed during the month of April due to the current staffing restrictions as a result of COVID-19.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

- Exceeding Target.

LADWP RATES METRIC – MAINLINE REPLACEMENT (Water)

RESPONSIBLE MANAGER: Breonia Lindsey/Sandra Foster

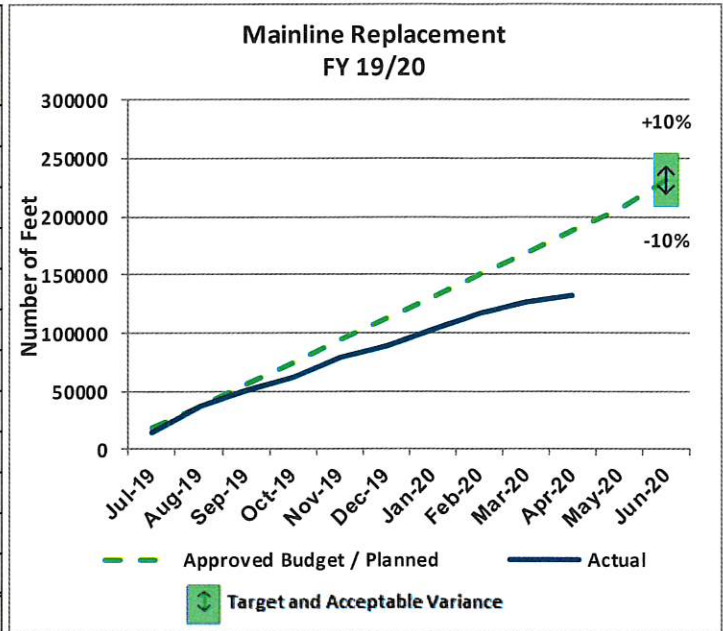
REPORTING PERIOD: April 2020

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

TARGET & ACCEPTABLE VARIANCE (FY 19/20): 232,000 feet, ±10%

STATUS: Outside Acceptable Variance

FYTD as of:	Approved Budget / Planned	Actual	Variance		Re-Estimate (If Applicable)
			Feet	%	
Jul-19	18,750	15,090	-3660	-19.5%	
Aug-19	37,500	36,247	-1253	-3.3%	
Sep-19	56,250	51,128	-5122	-9.1%	
Oct-19	75,000	62,795	-12205	-16.3%	
Nov-19	93,750	78,406	-15344	-16.4%	
Dec-19	112,500	88,386	-24114	-21.4%	
Jan-20	131,250	102,998	-28252	-21.5%	
Feb-20	150,000	116,529	-33471	-22.3%	
Mar-20	168,750	125,830	-42920	-25.4%	
Apr-20	187,500	132,287	-55213	-29.4%	
May-20	206,250				159,800
Jun-20	232,000				174,000
Acceptable Variance			± 10%		-25.0%



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

- The rate of mainline replacement for this reporting period is outside of the acceptable variance range. The Division does not anticipate reaching the 2019/2020 goal. Due to the Covid-19 pandemic, field work was reduced to enable physical distancing and help stop the spread of Covid-19. In addition, mainline crews were assigned to perform service installations and leak repairs to limit prolonged noise and exposure to residents with school-aged children. The 2019/2020 goal has been re-estimated to 174,000 feet to more accurately reflect the labor expected to be completed by current staffing levels.

2. ACHIEVEMENTS / MILESTONES MET

- As of April 2020, 132,287 feet of mainline have been installed.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

- Once hiring resumes, the Division will continue with planned hiring and training for mainline crews to reach the replacement rate of 300,000 feet of pipe per year, resulting in a replacement cycle of 120 years and meet customer demand for new installations.

LADWP RATES METRIC - TRUNK LINE REPLACEMENT (Water)

RESPONSIBLE MANAGER: Gregory R. Reed

REPORTING PERIOD: April 2020

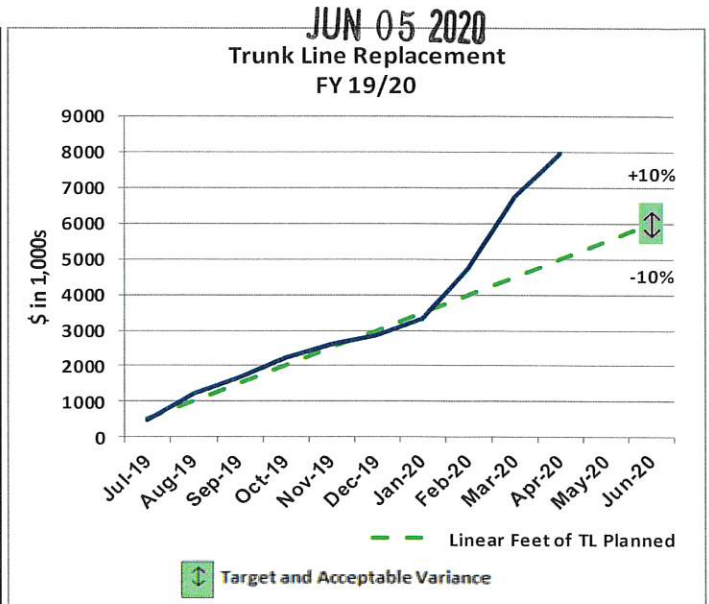
DEFINITION OF RATES METRIC: Feet of trunk line replaced against the plan.

TARGET & ACCEPTABLE VARIANCE (FY 19/20): 6,000 feet, 10 percent

GREGORY REED

STATUS: Exceeds Target

FYTD as of:	Linear Feet of TL Planned	Actual Linear Feet of TL Replaced	Variance		Re-Estimate (If Applicable)
			ft	%	
Jul-19	500	476	-24	-4.8%	
Aug-19	1,000	1,225	225	22.5%	
Sep-19	1,500	1,667	167	11.1%	
Oct-19	2,000	2,220	220	11.0%	
Nov-19	2,500	2,609	109	4.4%	
Dec-19	3,000	2,860	-140	-4.7%	
Jan-20	3,500	3,329	-171	-4.9%	
Feb-20	4,000	4,724	724	18.1%	
Mar-20	4,500	6,743	2,243	49.8%	
Apr-20	5,000	7,921	2,921	58.4%	
May-20	5,500				9,686
Jun-20	6,000				12,000
Acceptable Variance			± 10%		100.0%



SOURCE OF DATA: FI 23150 - Job 51054; FI 23222 - Jobs 23204, 23117, 23435; FI 26220 - Jobs 23213, 23137, 23528, 23548, 23549; FI 29130 - Jobs 20058; FI 29140 - Job 41026

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.

- 330 feet of trunk line was installed on Fletcher Trunk Line through April 2020.
- 756 feet of trunk line was installed on RSC 7 through April 2020.

2. ACHIEVEMENTS / MILESTONES MET

- 777 feet of trunk line was installed on City Trunk Line South Unit 3 through April 2020.
- 1,322 feet of trunk line was installed on Foothill Trunk Line through April 2020.
- 948 feet of trunk line was installed on MWD-LA 30 through April 2020.
- 389 feet of trunk line was installed on Machado Lake Pipeline through April 2020.
- Notice to Proceed for Century Trunk Line Unit 1 was issued in November 2019. Phase 2 construction began in January 2020. Phase 1 construction began in February 2020. 1,641 feet of trunk line was installed on Century Trunk Line Unit 1 through April 2020.

3. PERFORMANCE / VARIANCE ANALYSIS AND YEAR-END PROJECTION

- Goal was revised to include approximately 6,000 feet of additional trunk line installation for an expected total year-end target of approximately 12,000 feet.
- City Trunk Line South Unit 3, MWD-LA 30, and Century Trunk Line Unit 1 are moving quicker than originally anticipated.
- Bureau of Engineering's requirement for LADWP to install the North Outfall Sewer Bypass delayed the start of RSC 7 tunneling and pipe installation by approximately six months. To reduce the schedule delay, the Contractor was able to move up the cut and cover trunk line installation portion to start in February 2020.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

- Exceeding Target.

Within Acceptable Variance Outside Acceptable Variance Exceeds Target Needs Attention

LADWP RATES METRIC – METER REPLACEMENT (Water)

RESPONSIBLE MANAGER: Breonia Lindsey/Sandra Foster

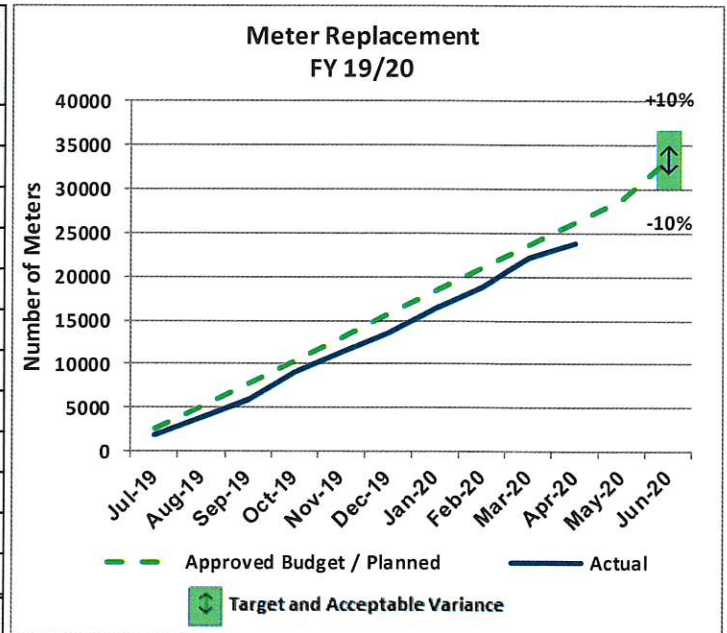
REPORTING PERIOD: April 2020

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

TARGET & ACCEPTABLE VARIANCE (FY 19/20): 33,500 meters, ±10%

STATUS: Within Acceptable Variance

FYTD as of:	Approved Budget / Planned	Actual	Variance		Re-Estimate (If Applicable)
			Meters	%	
Jul-19	2,625	1,898	-727	-27.7%	
Aug-19	5,250	3,894	-1356	-25.8%	
Sep-19	7,875	6,039	-1836	-23.3%	
Oct-19	10,500	9,210	-1290	-12.3%	
Nov-19	13,125	11,302	-1823	-13.9%	
Dec-19	15,750	13,638	-2112	-13.4%	
Jan-20	18,375	16,350	-2025	-11.0%	
Feb-20	21,000	18,832	-2168	-10.3%	
Mar-20	23,625	22,115	-1510	-6.4%	
Apr-20	26,250	23,870	-2380	-9.1%	
May-20	28,875				28,875
Jun-20	33,500				31,500
Acceptable Variance			± 10%		-6.0%



SOURCE OF DATA: FI 27215, Job 30053

1. BACKGROUND / PURPOSE

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

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- The rate of meter replacement for this reporting period is within the acceptable variance range. The 2019/2020 goal has been re-estimated to 31,500 meters to more accurately reflect the labor expected to be completed by current staffing levels.

2. ACHIEVEMENTS / MILESTONES MET

- As of April 2020, 23,870 meters of the 31,500 re-estimated fiscal year goal have been replaced.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

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

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

GREGORY REED

RESPONSIBLE MANAGER: Gregory R. Reed

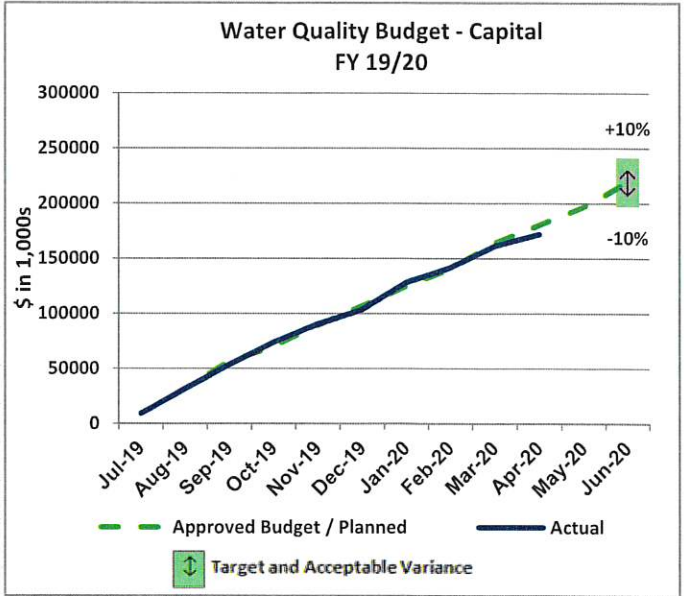
REPORTING PERIOD: April 2020

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

TARGET & ACCEPTABLE VARIANCE (FY 19/20): \$219M, 10 percent

STATUS: Within Acceptable Variance

FYTD as of:	Approved Budget / Planned	Actual	Variance		Re-Estimate (If Applicable)
			\$	%	
Jul-19	9,025	9,026	1	0.0%	
Aug-19	31,565	31,565	0	0.0%	
Sep-19	56,043	53,457	-2,586	-4.6%	
Oct-19	69,740	73,533	3,793	5.4%	
Nov-19	89,301	90,143	842	0.9%	
Dec-19	106,523	103,446	-3,077	-2.9%	
Jan-20	124,523	128,042	3,519	2.8%	
Feb-20	140,213	141,362	1,149	0.8%	
Mar-20	163,794	161,256	-2,538	-1.5%	
Apr-20	180,214	171,878	-8,336	-4.6%	
May-20	196,432				
Jun-20	219,104				
Acceptable Variance			± 10%		



SOURCE OF DATA: FIs 23222, 24130, 24310, 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

- Fairmont Sedimentation Plant contract requisition approved for processing - expected advertisement date has been delayed to August 2020 due to COVID-19.
- Installation and hydrostatic testing of all pipelines for the LA Reservoir UV Disinfection Plant is complete. Treatment equipment was installed February 2020 and is being configured for upcoming testing.
- Purchase Order for the Filtration Package on the 99th St. Wells Filtration Plant was issued in September 2019. Construction for 99th St. Wells Chloramination Station was completed in December 2019 and commissioning will commence after the

99th St. Wells Filtration Plant is completed in September 2021.

- Contract was awarded for the Design-Build San Fernando Groundwater Basin Remediation Projects – North Hollywood Centralized Treatment, and Tujunga Centralized Treatment in August 2019. The first task order was issued in November 2019.
- Upper Stone Canyon Reservoir Water Quality Improvement Project, LADWP’s largest floating cover, was installed and the reservoir was placed in-service in July 2019.

3. PERFORMANCE / VARIANCE ANALYSIS AND YEAR-END PROJECTION

- Water Quality Capital Budget goals to date are on target within acceptable variance.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

- Target within acceptable variance.

Within Acceptable Variance Outside Acceptable Variance Exceeds Target Needs Attention

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

ECD

(Water)

RESPONSIBLE MANAGER: Evelyn Cortez-Davis

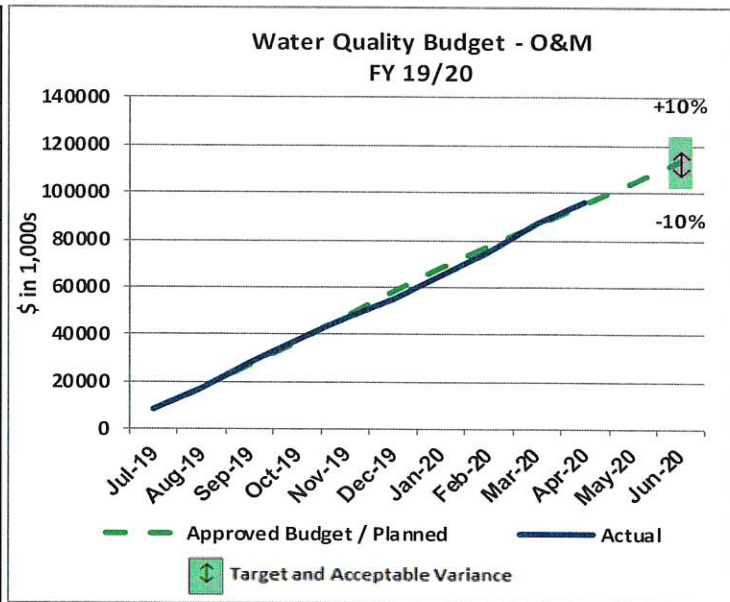
REPORTING PERIOD: April 2020

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

TARGET & ACCEPTABLE VARIANCE (FY 19/20): \$99,257K, 10 percent

STATUS: Within Acceptable Variance

FYTD as of:	Approved Budget / Planned	Actual	Variance		Re-Estimate (If Applicable)
			\$	%	
Jul-19	8,023	8,023	0	0.0%	
Aug-19	17,772	17,772	0	0.0%	
Sep-19	27,005	28,385	1,380	5.1%	
Oct-19	36,637	38,136	1,499	4.1%	
Nov-19	47,270	46,857	-413	-0.9%	
Dec-19	58,302	55,095	-3,207	-5.5%	
Jan-20	67,735	65,275	-2,460	-3.6%	
Feb-20	76,967	75,052	-1,915	-2.5%	
Mar-20	86,200	87,157	957	1.1%	
Apr-20	95,232	96,368	1,136	1.2%	
May-20	104,265				
Jun-20	113,272				
Acceptable Variance			± 10%		



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

1. BACKGROUND / PURPOSE

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

2. ACHIEVEMENTS / MILESTONES MET

- Distribution Treatment Operations – Chlorine reduction at the Los Angeles Reservoir is at 95%.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- All Water Quality O&M Budgets are on target.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

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

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

Michael E. Grahek [Water]

RESPONSIBLE MANAGER: Michael E. Grahek

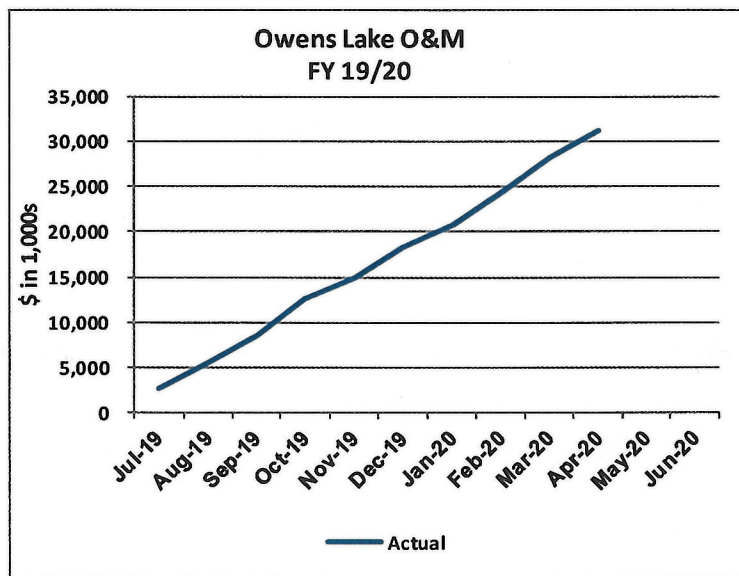
REPORTING PERIOD: April 2020

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

TARGET & ACCEPTABLE VARIANCE (FY 19/20): N/A – for information only

STATUS: Information Only

FYTD as of:	Actual
Jul-19	2,624
Aug-19	5,516
Sep-19	8,534
Oct-19	12,538
Nov-19	14,973
Dec-19	18,195
Jan-20	20,840
Feb-20	24,358
Mar-20	28,119
Apr-20	31,126
May-20	
Jun-20	



SOURCE OF DATA: Fls 3022002 and 4013006

1. BACKGROUND / PURPOSE

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

2. ACHIEVEMENTS / MILESTONES MET

- Tillage Maintenance – Crews have completed 1,000 acres of leveling, retilling and crosscutting.
- Managed Vegetation – Crews have planted 372,000 plants, amended/reseeded 93 acres and transplanted 15 acres of sod.
- Berm Building – Crews have constructed 2,800 feet of berms to enhance water saving.
- Drainage Improvements – Crews have imported 10,500 cubic yards of sand at T2-1B Dust Control Area.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- On target

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

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

Joint System

LADWP RATES METRIC – Total FTEs Against Plan

RESPONSIBLE MANAGER: Shannon C. Pascual

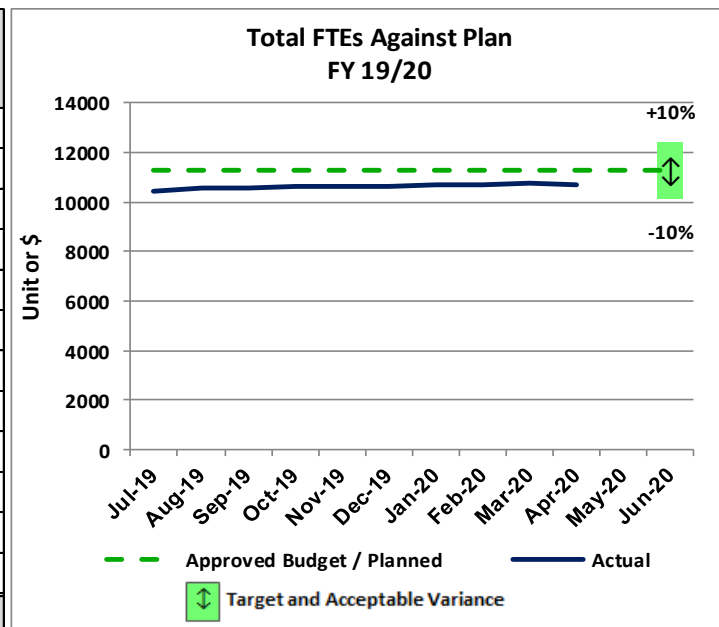
REPORTING PERIOD: April 2020

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

TARGET & ACCEPTABLE VARIANCE (FY 19/20): +/- 10%

STATUS: Within Acceptable Variance

FYTD as of:	Approved Budget / Planned	Actual	Variance		Re-Estimate (If Applicable)
			Unit or \$	%	
Jul-19	11,263	10,424	-839	-7.4%	
Aug-19	11,263	10,548	-715	-6.3%	
Sep-19	11,263	10,575	-688	-6.1%	
Oct-19	11,263	10,609	-654	-5.8%	
Nov-19	11,263	10,612	-651	-5.8%	
Dec-19	11,263	10,599	-664	-5.9%	
Jan-20	11,263	10,687	-576	-5.1%	
Feb-20	11,263	10,713	-550	-4.9%	
Mar-20	11,263	10,730	-533	-4.7%	
Apr-20	11,263	10,666	-597	-5.3%	
May-20	11,263				
Jun-20	11,263				
Acceptable Variance			± 10%		



SOURCE OF DATA: Monthly Staffing Report

1. BACKGROUND / PURPOSE

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

2. ACHIEVEMENTS / MILESTONES MET

- External Hires = 3
- Attrition = 54
- Net New Employees = -51

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

LADWP’s staffing level is within the acceptable limits. HR expects this to continue until the year-end.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

N/A

LADWP RATES METRIC – *Financial and Human Resources*

Replacement Project (Project) Total Spending Against Plan (Joint)

RESPONSIBLE MANAGER: Flora Chang
Information Technology Corporate Program Management Office

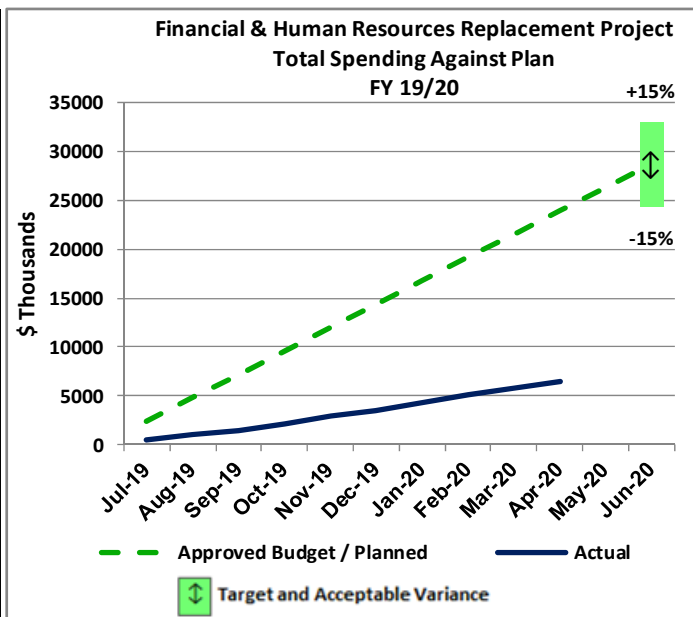
REPORTING PERIOD: April 2020

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

TARGET & ACCEPTABLE VARIANCE (FY 19/20): +/-20% of FY 19/20 Board Approved Budget

STATUS: **Outside Acceptable Variance**

FYTD as of:	Approved Budget / Planned	Actual	Variance		Re-Estimate (If Applicable)
			Unit or \$	%	
Jul-19	2,393.7	539.0	-1855	-77.5%	
Aug-19	4,787.4	996.0	-3791	-79.2%	
Sep-19	7,181.1	1,482.0	-5699	-79.4%	
Oct-19	9,574.8	2,190.0	-7385	-77.1%	
Nov-19	11,968.5	2,889.0	-9080	-75.9%	
Dec-19	14,362.2	3,551.0	-10811	-75.3%	5279.6
Jan-20	16,755.9	4,316.0	-12440	-74.2%	6159.5
Feb-20	19,149.6	5,076.0	-14074	-73.5%	7039.4
Mar-20	21,543.3	5,734.0	-15809	-73.4%	7919.3
Apr-20	23,937.0	6,405.0	-17532	-73.2%	8595.6
May-20	26,330.7				9271.6
Jun-20	28,724.7				9947.5
Acceptable Variance			± 15%		-65.4%



SOURCE OF DATA: FI 29401

1. BACKGROUND/PURPOSE

- This Project establishes the Department's (Dept.) integrated Enterprise Resource Planning (ERP) Program consisting of Financial Management, Payroll, Human Resources Management and Procurement
- The ERP program is an enterprise-level initiative to enable the Dept. to update/improve its business processes and support its strategic goals by migrating/replacing dated technologies and platforms to an integrated and sustainable set of modern, robust and easy-to-use solutions
- To establish the ERP program, the Dept. is engaging in a two-stage procurement process:
 - Stage One: Currently evaluating Request for Qualification (RFQ) to select the best fit software (SW)
 - Stage Two: Issue a Request for Proposal (RFP) to select a System Integrator (SI) to implement the selected SW to achieve the ERP program goals

2. ACHIEVEMENTS/MILESTONES MET

- November 19, 2019: RFQ 90549 released
- December 4, 2019: RFQ 90549 Bidders' Conference
- January 14, 2020: RFQ 90549 responses received and evaluations commenced

3. PERFORMANCE/VARIANCE ANALYSIS & YEAR END PROJECTION

- Project progress was temporarily delayed while the Dept. reprioritized critical projects and hire needed resources. Therefore actual spending will be well below the \$28.7 million approved for FY 19/20
- Additionally, the Stay at Home Order and Social Distancing requirements, due to COVID-19, postponed hiring and SW selection. The budget was re-estimated down to \$9.9 million to be more in-line with projected year-end actuals
- ERP labor expenditures are below approved budgets as hiring of additional project positions is frozen

4. MITIGATION PLAN AND/OR RECOMMENDATIONS

- Proceed with achieving ERP Program milestones that reflect the revised timeline for sourcing and selection of SW and SI services by utilizing tools that enable remote access such as WebEx Event and WebEx Teams in lieu of face to face meetings. Use of these tools enable the project to continue and, at the same time, to stay in compliance with the Stay at Home Order and Social Distancing requirements
- Spending expected to pick up Fiscal Year 20/21

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

RESPONSIBLE MANAGER: Flora Chang
Information Technology Corporate Program Management Office

REPORTING PERIOD: April 2020

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

TARGET & ACCEPTABLE VARIANCE (FY 19/20): 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	
ERP SW Vendor Selected	May, 2020	
Vendor Information Day	June, 2020	
ERP System Integrator (SI) RFP Released	August, 2020	
ERP SI Bidders' Conference	August, 2020	
ERP SI RFP Responses Due	October, 2020	
Response Evaluation & Demos	November, 2020	
Best Value ERP SI Vendor Selected	December, 2020	
ERP SI Blueprint / Prototyping	March, 2021	
Contract Negotiations Completed	July, 2021	

SOURCE OF DATA: FI 29401

1. BACKGROUND/PURPOSE

- This Project is to establish the Department's (Dept.) integrated Enterprise Resource Planning (ERP) program consisting of Financial Management, Payroll, Human Resources Management and Procurement
- The ERP program is an enterprise-level initiative to enable the Dept. to update/improve its business processes and support its strategic goals by migrating/replacing dated technologies and platforms to an integrated and sustainable set of modern, robust and easy-to-use solutions
- To establish the ERP program, the Dept. is engaging in a two-stage procurement process:
 - Stage One: Currently evaluating Request for Qualification (RFQ) to select the best fit software (SW)
 - Stage Two: Issue a Request for Proposal (RFP) to select a System Integrator (SI) to implement the selected SW to achieve the ERP program goals

2. ACHIEVEMENTS/MILESTONES MET

- November 19, 2019: RFQ 90549 released
- December 4, 2019: RFQ 90549 Bidders' Conference
- January 14, 2020: RFQ 90549 responses received and evaluations commenced

3. PERFORMANCE/VARIANCE ANALYSIS & YEAR END PROJECTION

- The stay at Home Order and Social Distancing requirements, due to COVID-19, delayed all of the Milestone/Deadlines by approximately three months. Therefore, for example, the next project Milestone/Deadline (Response Evaluation & Demos) was revised from April, 2020 to July, 2020

4. MITIGATION PLAN AND /OR RECOMMENDATIONS

- Proceed with achieving ERP Program milestones that reflect the revised timeline for sourcing and selection of SW and SI services by utilizing tools that enable remote access such as WebEx Event and WebEx Teams in lieu of face to face meetings. Use of these tools enable the project to continue and, at the same time, to stay in compliance with the Stay at Home Order and Social Distancing requirements

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

RESPONSIBLE MANAGER: LADWP Senior Management

REPORTING PERIOD: April 2020

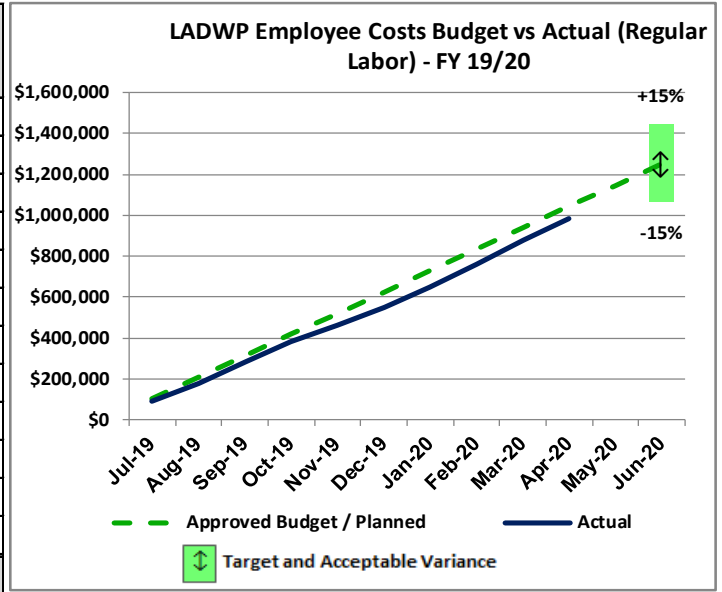
DEFINITION OF RATES METRIC: LADWP employee costs (including regular labor, overtime, pension and healthcare, excluding daily exempt and Utility Pre-Craft Trainee) budget vs. actual (\$M)

TARGET & ACCEPTABLE VARIANCE (FY 19/20): +/- 15%

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

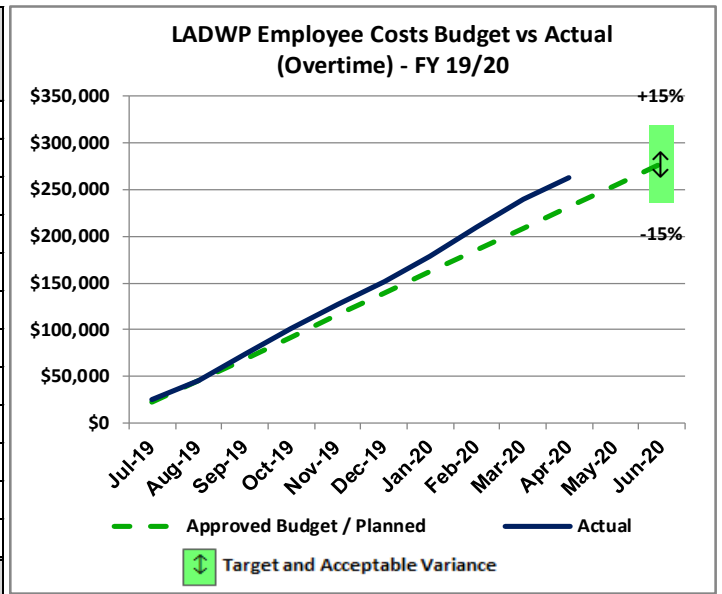
REGULAR LABOR STATUS: Within Acceptable Variance

FYTD as of:	Approved Budget / Planned	Actual	Variance		Re-Estimate (If Applicable)
			Unit or \$	%	
Jul-19	104,307	94,081	-10,227	-9.8%	
Aug-19	208,614	178,928	-29686	-14.2%	
Sep-19	312,921	282,919	-30003	-9.6%	
Oct-19	417,228	381,738	-35490	-8.5%	
Nov-19	521,536	463,598	-57937	-11.1%	
Dec-19	625,843	548,712	-77130	-12.3%	
Jan-20	730,150	647,608	-82542	-11.3%	
Feb-20	834,457	760,034	-74423	-8.9%	
Mar-20	938,764	876,779	-61985	-6.6%	
Apr-20	1,043,071	984,291	-58780	-5.6%	
May-20	1,147,378				
Jun-20	1,251,685				
Acceptable Variance			± 15%		



OVERTIME STATUS: Within Acceptable Variance

FYTD as of:	Approved Budget / Planned	Actual	Variance		Re-Estimate (If Applicable)
			Unit or \$	%	
Jul-19	23,109	25,496	2,388	10.3%	
Aug-19	46,217	46,168	-49	-0.1%	
Sep-19	69,326	73,671	4345	6.3%	
Oct-19	92,434	101,121	8687	9.4%	
Nov-19	115,543	126,558	11015	9.5%	
Dec-19	138,651	151,176	12524	9.0%	
Jan-20	161,760	179,244	17484	10.8%	
Feb-20	184,868	209,946	25078	13.6%	
Mar-20	207,977	239,125	31148	15.0%	
Apr-20	231,086	262,145	31059	13.4%	
May-20	254,194				
Jun-20	277,303				
Acceptable Variance			± 15%		



Employee Cost Category	YTD as of April 2020				FY 19/20 Approved
	Budget	Actual	Variance	Variance %	
Regular Labor	1,043,071	984,291	-58,780	-5.6%	1,251,685
Overtime	231,086	262,145	31,059	13.4%	277,303
Regular Labor + Overtime	1,274,157	1,246,436	-27,721	-2.2%	1,528,988
Health Care Allocation	304,690	287,660	-17,029	-5.6%	333,763
Retirement & Death Benefit	491,492	382,904	-108,588	-22.1%	531,377
Total	2,070,338	1,917,000	-153,338	-7.4%	2,394,128

Within Acceptable Variance
Outside Acceptable Variance
Exceeds Target
Needs Attention

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

RESPONSIBLE MANAGER: Corporate Performance

REPORTING PERIOD: April 2020

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 19/20): No Target

STATUS: Information Only

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

1. BACKGROUND / PURPOSE

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

2. ACHIEVEMENTS / MILESTONES MET

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

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

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

As of April 2020:

Total Number of Water and Power Employees per Customer Meter $10,666/2,301,593 = .0046$

Total Number of Water and Power Employees (excluding daily exempt and utility pre-craft trainees) as of April 2020.

System	Occupied
Power	5,262
Water	2,080
Joint	3,324
Total	10,666

Total Number of Water and Power Meters as of April 2020.

	Total
Power	1,592,179
Water	709,414
Total	2,301,593

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

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

LADWP RATES METRIC – GHG Emissions Reduction Ratio (Joint)

RESPONSIBLE MANAGER: Mark Sedlacek

REPORTING PERIOD: As of June 2020

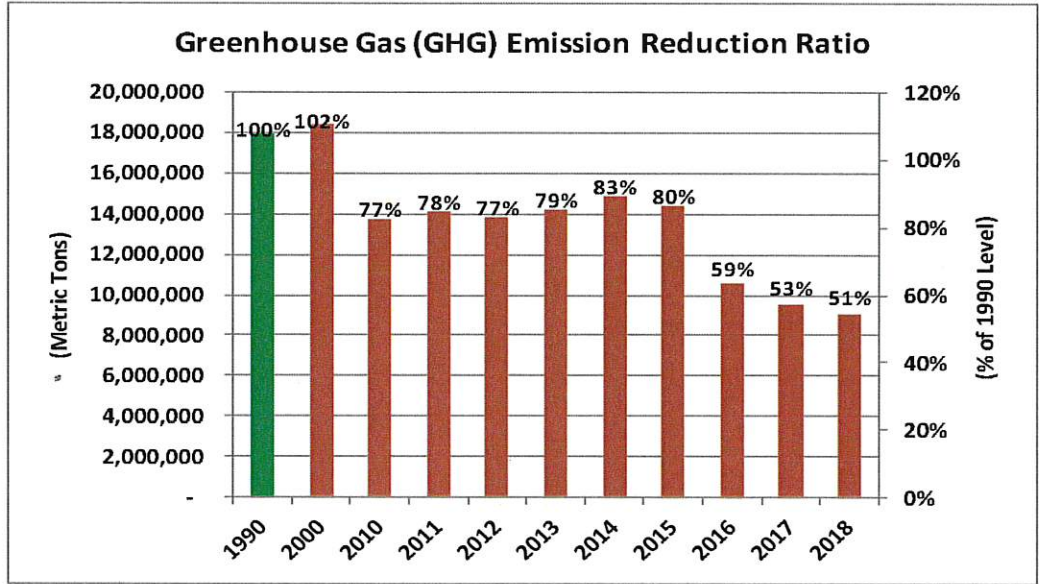
DEFINITION OF RATES METRIC: Current Year GHG Emissions /1990 GHG Emissions

TARGET & ACCEPTABLE VARIANCE (CY 2018): 50%; +5%

STATUS: Within Acceptable Variance

- CY 2018 Target: 50% of 1990 GHG Emission level
- CY 2018 Acceptable Variance: + 5%

Historical Trend:		
CY	CO2 Emissions (Metric Tons)	% of 1990 CO2 Emission Level
1990	17,925,410	100%
2000	18,373,127	102%
2010	13,715,553	77%
2011	14,070,732	78%
2012	13,796,930	77%
2013	14,185,254	79%
2014	14,911,781	83%
2015	14,422,532	80%
2016	10,566,904	59%
2017	9,554,443	53%
2018	9,060,486	51%



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

1. BACKGROUND / PURPOSE

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

2. ACHIEVEMENTS / MILESTONES MET

- Early divestiture of Navajo Generating Station in July 2016.
- Beginning January 1, 2016, 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 2018 included 32% renewable energy.

- LADWP's 2018 emissions are 49 percent below its 1990 emissions baseline.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- No variance explanation needed.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

- No mitigation needed. GHG emissions have been significantly reduced as a result of measures listed under #2.

Within Acceptable Variance Outside Acceptable Variance Exceeds Target Needs Attention

LADWP RATES METRIC – Energy Savings Variance Report (Joint)

RESPONSIBLE MANAGER: David Jacot

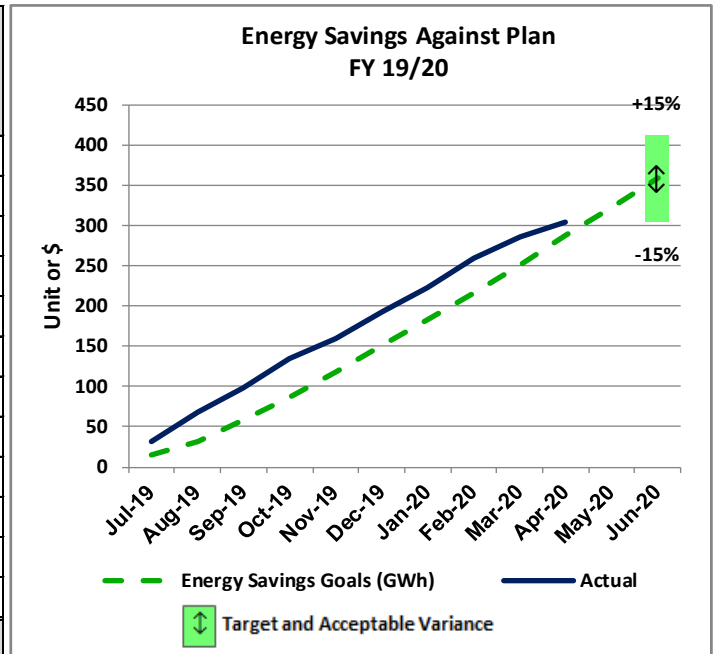
REPORTING PERIOD: April 2020

DEFINITION OF RATES METRIC: Energy Savings Against Plan

TARGET & ACCEPTABLE VARIANCE (FY 19/20): GWh Installed Compared to the 210 baseline/GWh for all customers. 15%

STATUS: Within Acceptable Variance

FYTD as of:	Energy Savings Goals (GWh)	Actual	Variance		Re-Estimate (If Applicable)
			Unit or \$	%	
Jul-19	14.5	31.0	17	113.8%	
Aug-19	32.4	67.7	35	109.0%	
Sep-19	57.5	97.7	40	69.9%	
Oct-19	86.2	134.0	48	55.5%	
Nov-19	118.5	159.0	41	34.2%	
Dec-19	150.7	192.7	42	27.9%	
Jan-20	183.0	222.1	39	21.4%	
Feb-20	215.3	258.6	43	20.1%	
Mar-20	251.1	285.5	34	13.7%	
Apr-20	287.0	303.7	17	5.8%	
May-20	322.9				
Jun-20	358.6				
Acceptable Variance			± 15%		



SOURCE OF DATA: Efficiency Solutions KPI FY 19-20 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

Commercial Direct Install (CDI), LAUSD Direct install, Consumer Rebate Program (CRP), Savings by Design (SBD), Upstream HVAC, Energy Savings Assistance Program, and City Plants Program, delivered energy savings above projections as of April 2020.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

Total energy savings as of April 2020 is at 303.7 GWh, exceeding the energy savings target by 17 GWh.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

Customer site-based Energy Efficiency programs/activities were suspended second week of March 2020, due to Covid 19 and “Safer at Home” LA City mandate. Programs will resume as soon as uniform safety protocols are developed for customer site-based programs/activities.

LADWP RATES METRIC – BUDGET VARIANCE ENERGY EFFICIENCY (JOINT)

RESPONSIBLE MANAGER: David Jacot

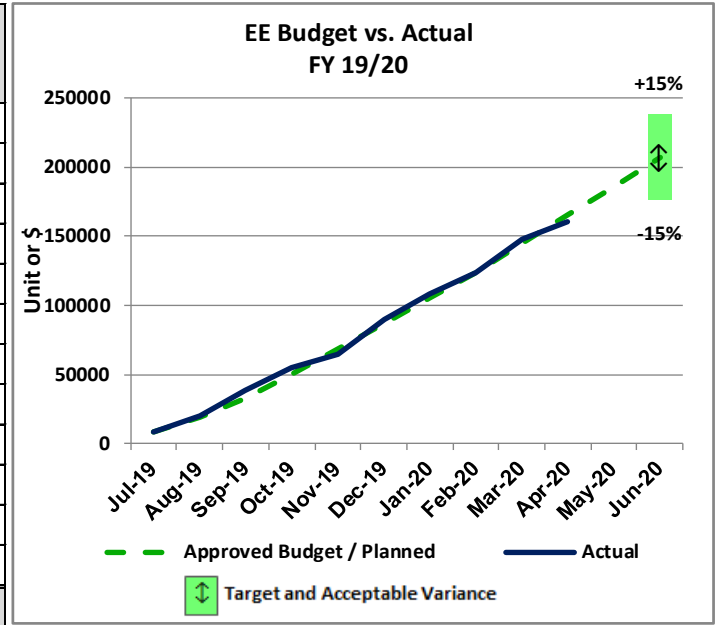
REPORTING PERIOD: April 2020

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

TARGET & ACCEPTABLE VARIANCE (FY 19/20): +/- 15%

STATUS: Within Acceptable Variance

FYTD as of:	Approved Budget / Planned	Actual	Variance		Re-Estimate (If Applicable)
			Unit or \$	%	
Jul-19	8,270	8,840	570	6.9%	
Aug-19	18,606	20,145	1539	8.3%	
Sep-19	33,078	38,142	5064	15.3%	
Oct-19	49,617	54,751	5134	10.3%	
Nov-19	68,233	64,691	-3542	-5.2%	
Dec-19	86,830	89,416	2586	3.0%	
Jan-20	105,436	107,735	2299	2.2%	
Feb-20	124,043	123,881	-162	-0.1%	
Mar-20	144,716	147,813	3097	2.1%	
Apr-20	165,390	160,380	-5010	-3.0%	
May-20	186,064				
Jun-20	206,737				
Acceptable Variance			± 15%		



SOURCE OF DATA:

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

There have been increased program activities in the Commercial and Residential Lighting Efficiency Incentive Programs, LAUSD Direct install, Consumer Rebate Program, Savings by Design Program.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

Energy efficiency program expenditures are at \$160.4M as of April 2020, or 5M below the approved budget due to the suspension of programs due to Covid 19 and the “Safer at Home” LA City mandate.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

Customer site-based Energy Efficiency programs/activities were suspended second week of March 2020, due to Covid 19 and “Safer at Home” LA City mandate. Programs will resume as soon as uniform safety protocols are developed for customer site-based programs/activities.

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

RESPONSIBLE MANAGER: David Jacot

REPORTING PERIOD: April 2020

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

TARGET & ACCEPTABLE VARIANCE (FY 19/20): Annual metric: Levelized Cost \$.0.082 +/- 15%

STATUS Within Acceptable Variance

SOURCE OF DATA: ESP Portfolios Report FY 18/19

1. BACKGROUND / PURPOSE

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

Life of efficiency measures vary from one to thirty years. The levelized cost of LADWP's efficiency program portfolio is calculated once per year (the most recent is FY 18-19) 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 18-19 was \$0.0356 per kWh saved resulting in a variance of -57% from the established \$0.082 target.

3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

LADWP's portfolio of energy efficiency programs has historically been very cost effective, with a levelized cost of \$0.0356, well below the \$0.082 target.

4. MITIGATION PLAN AND / OR RECOMMENDATIONS

Customer site-based Energy Efficiency programs/activities were suspended second week of March 2020, due to Covid 19 and "Safer at Home" LA City mandate. Programs will resume as soon as uniform safety protocols are developed for customer site-based programs/activities.

Within Acceptable Variance



Outside Acceptable Variance



Exceeds Target



Needs Attention



ATTACHMENT II
LADWP Equity Metrics Data Initiative

Equity Metrics Data Initiative

Equity Core Category	Equity Metric	Page #
Water & Power Infrastructure Investment	Water Quality Customer Inquiry	1-2
	Mainline Replacement	3-4
	SAIDI (System Average Interruption Duration Index)	5, 7-8
	SAIFI (System Average Interruption Frequency Index)	6-8
	PSRP - Poles Replaced	9-10
	PSRP - Transformers Replaced	11-12
	PSRP - Cable Replaced	13-14
Customer Incentive Programs/Services	Rain Barrel Rebates	15-16
	Turf Removal Rebates	17-18
	Tree Canopy Program	19-20
	Commercial Direct Install Program	21-22
	Home Energy Improvement Program	23-25
	Refrigerator Exchange Program	26-28
	Consumer Rebate Program	29-31
	Electric Vehicle Infrastructure	32-35
	Lifeline Discount Program	36-37
	Low Income Discount Program	38-39
Procurement	SBE (Small Business Enterprise)/DVBE (Disabled Veteran Business Enterprise) Program	40-41
Employment	New Hires/Promotions Demographic Composition	42

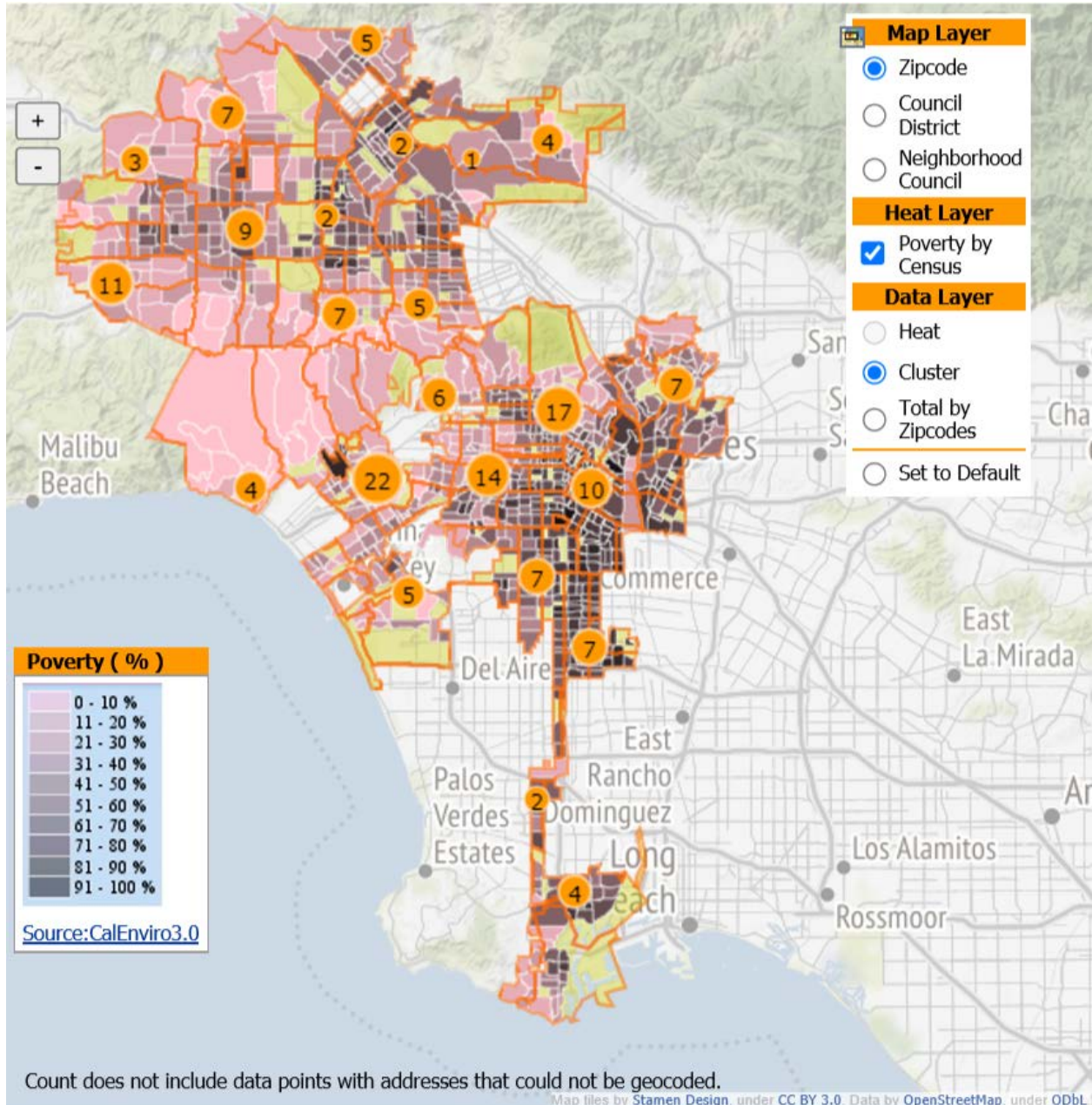
LADWP EMDI – Water & Power Infrastructure Investment

RESPONSIBLE MANAGER: Serge Haddad

Reporting Period: Nov 2019 – Apr 2020

Water Quality Customer Inquiry

The numbers shown on the map are the water quality complaints based on color, taste and odor that helps assist with evaluating trends or identifying potential system issues.



LADWP EQUITY METRIC – *Water Quality Customer Inquiries*

RESPONSIBLE MANAGER: Serge Haddad

REPORTING PERIOD: Nov 2019 - Apr 2020

EQUITY CORE CATEGORY: Responding to Customer Inquiries Before the End of the Next Business Day

1. NARRATIVE / BACKGROUND

During the period November 2019 to April 2020, a total of 161 water quality inquiries were received by the Water Quality Division including 68 inquiries regarding taste and/or odor and 93 for discolored water.

2. CRITERIA

- Taste/Odor inquiries
- Discolored water inquiries

3. GOALS and PROGRESS

- Goal: The Water Quality Division's goal is to respond to customer inquiries before the end of the next business day, 95% of the time or more.
- Progress: During the reporting period, the Water Quality Division met the goal.
- Progress: With data from the recent transactional surveys, customers continue to rate their experience as "excellent".

4. ISSUES

- With the current COVID-19 safety protocols, the Water Quality Division is limited in ability to do sampling during customer site inspections.

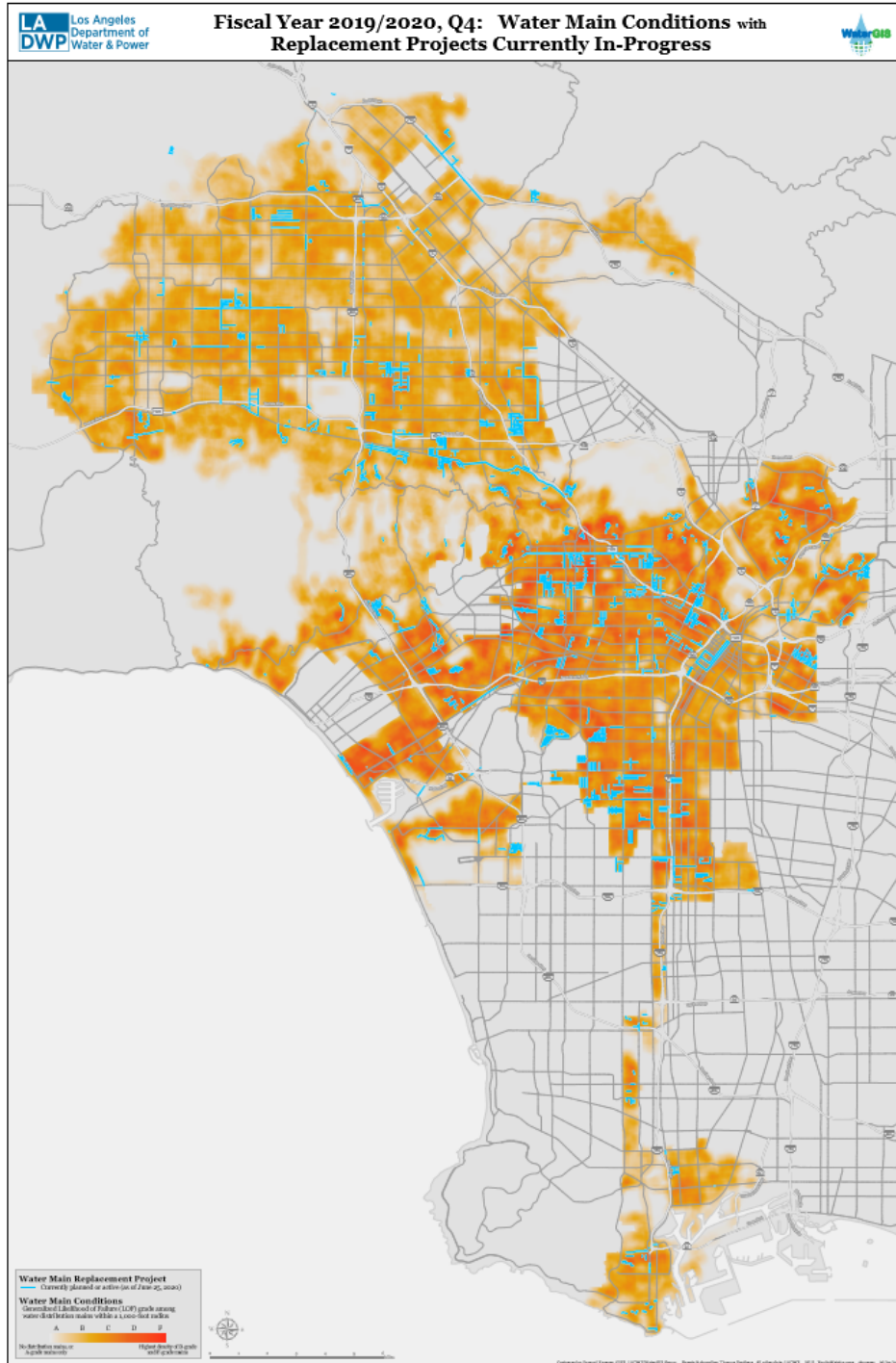
5. OUTREACH STRATEGY / PLAN

- The Water Quality Division is finalizing the Customer Service Improvement Program based on the recent Customer Journey Map exercise and transactional survey feedback.
- Water Quality Division staff will review data quarterly to determine the source of customer inquiries.
- The Water Quality Division has launched the Hydration Station Initiative Program to improve access to high quality tap water throughout the City.
- The Board of Water and Power Commissioners has adopted and approved the MOUs between LADWP, GSD and RAP to support the Hydration Station Initiative Program as part of Mayor Garcetti's Green New Deal to install 200 hydration stations city-wide.
- LADWP awarded a water quality grant to WeTap, to promote the environmental and health benefits of tap water. WeTap is developing an outreach program at local schools and communities in conjunction with LADWP.

Mainline Replacement

Mainline replacement is a portion of the Water System’s strategy to maintain reliability, to reduce leaks, and minimize interruptions and damage to the community. By mapping the geographic location of these replacements against the mainlines’ likelihood of failure heat map provides a visual indicator of how well the Department is addressing the replacement of mainlines most at risk of failure.

Decisions to replace Water Mainlines take into consideration the Mainlines’ Likelihood of Failure (LOF) Grade. The factors that contribute to the LOF Grade are: Leaks, Age, Material, Diameter, Pressure, Elevation, Soil Corrosiveness, Hillside/ground Movement.



LADWP EQUITY METRIC – *Title of Equity Metrics (System)*

RESPONSIBLE MANAGER: Alvin Bautista

REPORTING PERIOD: Nov 2019 – Apr 2020

EQUITY CORE CATEGORY: Water Infrastructure Investment – Mainline Replacement

1. NARRATIVE / BACKGROUND

There are approximately 6,700 miles of water mains (pipes less than 24 inches in diameter) throughout the City. Water mains are the backbone of the City's water distribution system. The Water System has prioritized mainline that are in the highest risk of failure for replacement. Pipes that are targeted for replacement are typically corroded cast-iron pipes that demonstrate frequent leaks and/or breaks. The Water System strives to provide continuous water service reliability to its customers through mainline replacement. Equity is achieved by focusing efforts to replace pipes in the City in areas that experience higher-than-normal pipe break rates, causing water service disruptions to customers.

2. CRITERIA

- Leak history (quantity, frequency)
- Soil condition
- Pipe age
- Risk of service interruption and community disruption

3. GOALS and PROGRESS

- Replaced over 1.98 million feet of mainline since Mainline Replacement Program inception (2006)
- Commenced pilot testing of alternative earthquake resilient pipe manufacturer to develop a competitive and diverse supplier base for resilient pipes
- Maintained a leak rate that is below the national industry average
- Consistently maintained highest levels of water reliability to customers

- Developed mainline replacement plan to support City of Los Angeles' Green New Deal goals

4. ISSUES

As of April 2020, mainline replacement was approximately 60% of the 225,000 feet goal for Fiscal Year 2019/20. Replacement efforts have been further curtailed by the COVID19 pandemic, and the recent civil unrest. Other contributing factors include labor staffing, increasing regulations, and additional work measures implemented to increase overall safety.

5. OUTREACH STRATEGY / PLAN

- Promote resource sharing between districts to systematically replace pipes in areas of greatest leak density
- Aggressively seek eligible candidates to hire and fill vacant and open positions
- Continue to provide and promote safety and training to all existing and newly-hired employees
- Continue to develop LADWP-owned properties to strategically place construction crews close to planned mainline replacement projects
- Work and collaborate with other City departments to streamline permitting process/project execution
- Review and update Five-Year Action Plan to set and communicate achievable goals for mainline replacement footage (goal is to ultimately achieve a replacement cycle that is compatible with expected life of the asset)

LADWP EMDI – Water & Power Infrastructure Investment

RESPONSIBLE MANAGER: Herman Cheng

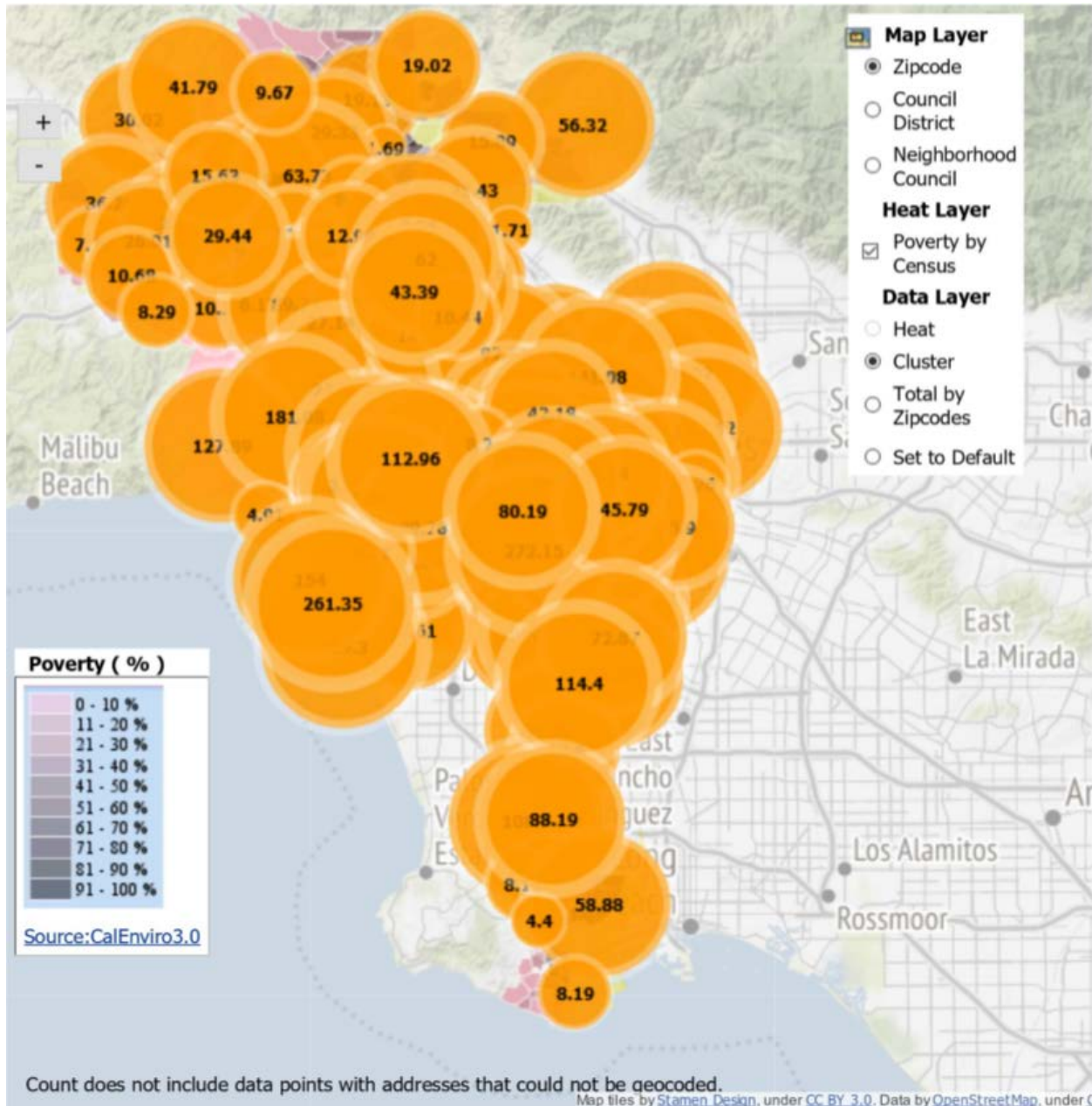
Reporting Period: Nov 2019 – Apr 2020

SAIDI

The following reliability indices are used to measure the reliability performance of LADWP’s distribution system in a 12-month rolling average:

- **System Average Interruption Duration Index (SAIDI):** Average # of minutes a customer power is out in a year for the system

The numbers shown on the map are the average number of minutes a customer’s power is out in a year for the system by geographic area.



LADWP EMDI – Water & Power Infrastructure Investment

RESPONSIBLE MANAGER: Herman Cheng

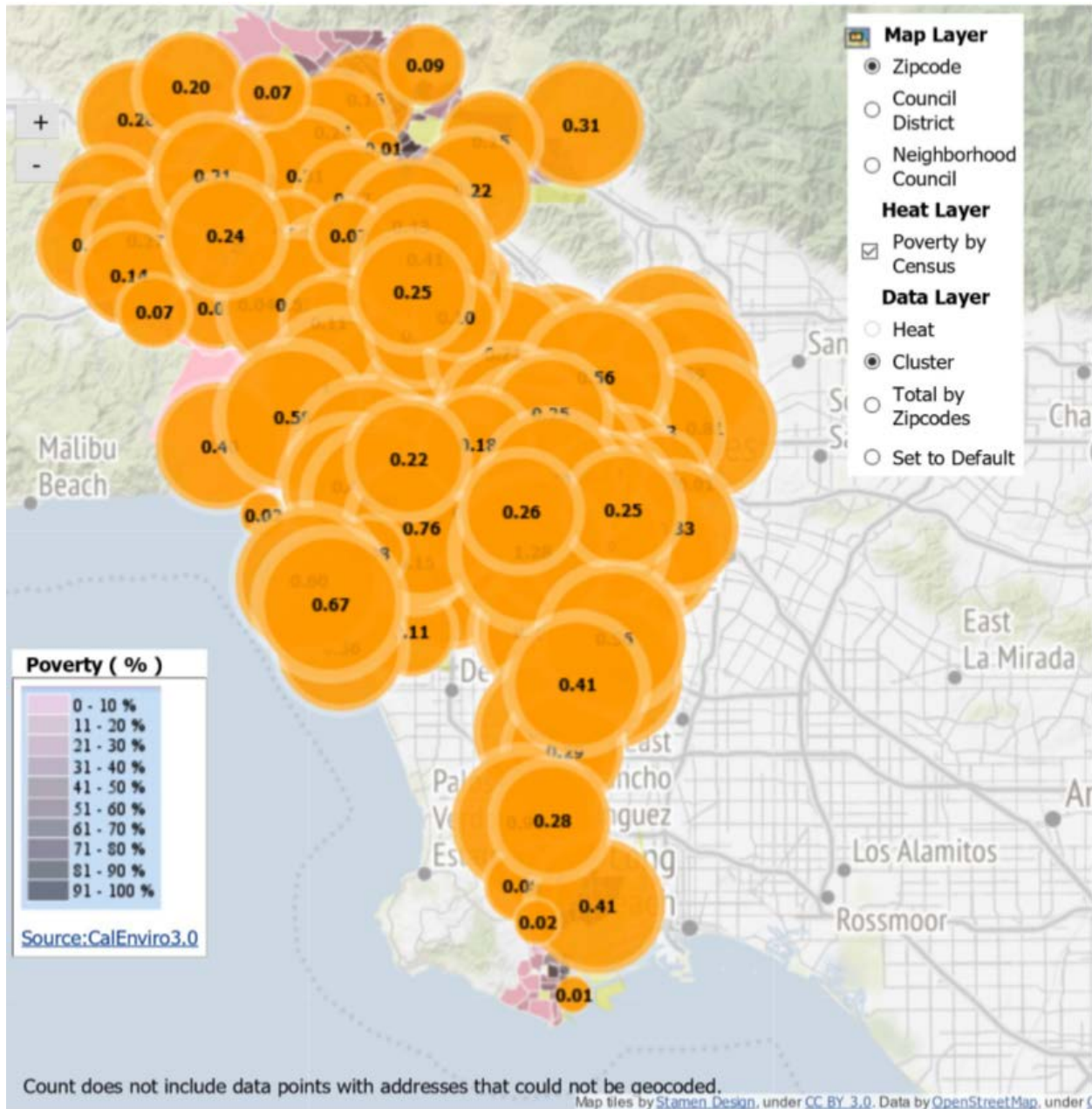
Reporting Period: Nov 2019 – Apr 2020

SAIFI

The following reliability indices are used to measure the reliability performance of LADWP’s distribution system in a 12-month rolling average:

- **System Average Interruption Frequency Index (SAIFI):** Average # of interruptions per year for the system

The numbers shown on the map are the average number of interruptions per year for the system by geographic area.

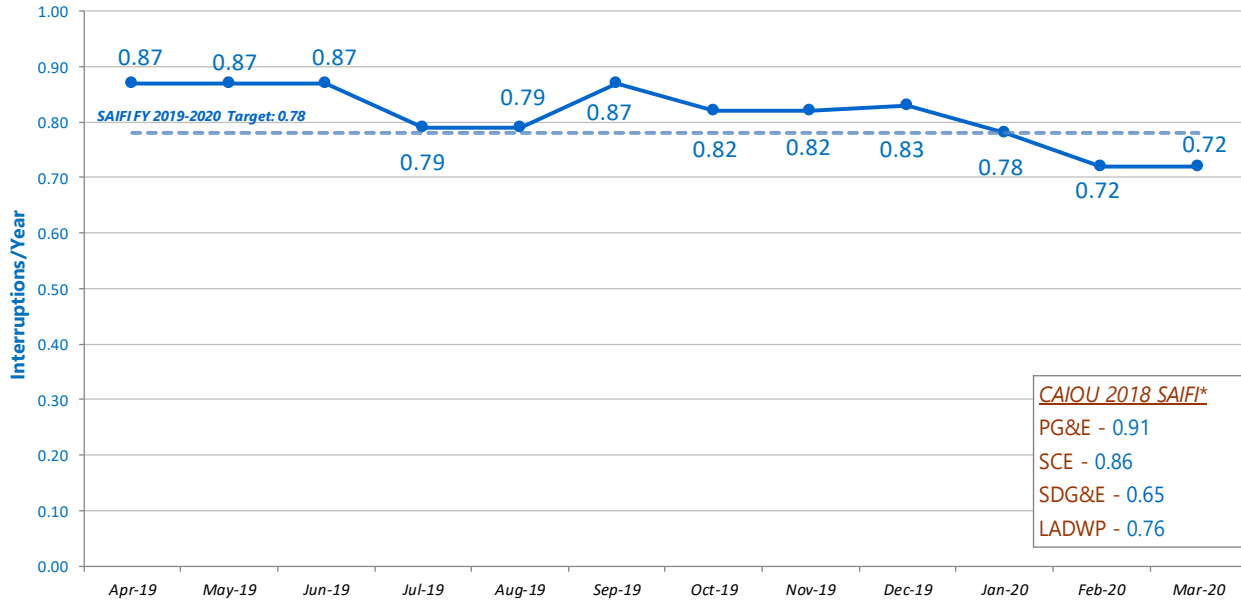


LADWP EQUITY METRIC – SAIFI AND SAIDI (POWER)

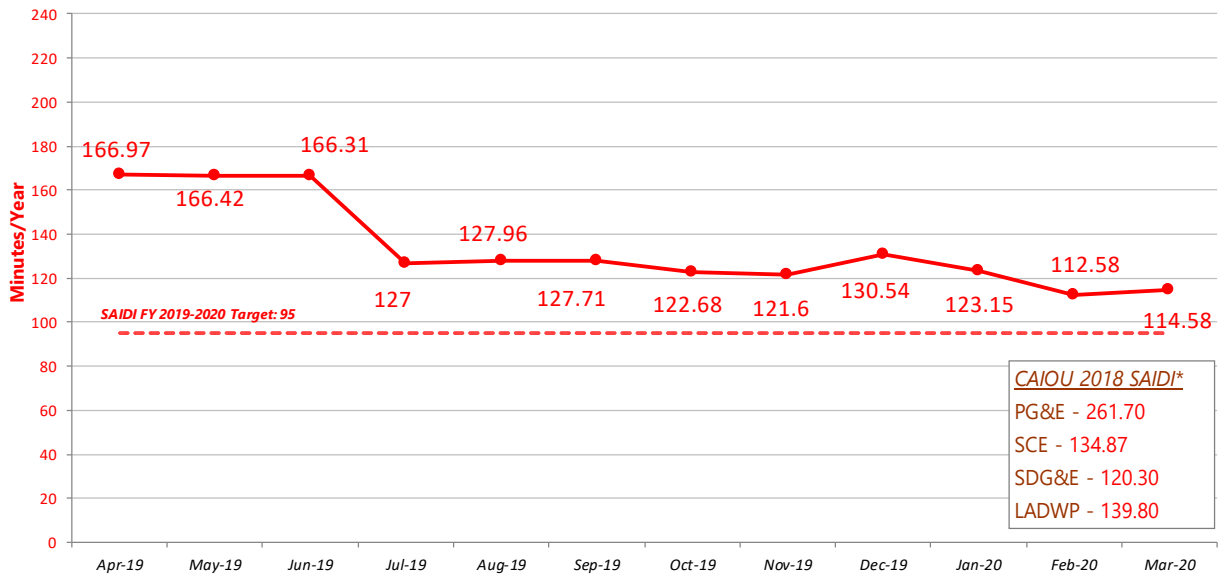
RESPONSIBLE MANAGER: Herman Cheng *HC*
 EQUITY CORE CATEGORY: Water and Power Infrastructure Investment

REPORTING PERIOD: Apr 2020 (Rolling Data Ending Mar 2020)

Power Distribution Service Reliability Indices
 System Average Interruption Frequency Index (SAIFI)



Power Distribution Service Reliability Indices
 System Average Interruption Duration Index (SAIDI)



*CPUC is the source of CAIOU data (<http://www.cpuc.ca.gov/General.aspx?id=4529>).
 The monthly SAIFI/SAIDI indices for the ZIP codes are listed in Attachment A.

1. NARRATIVE / BACKGROUND

SOURCE OF DATA: KPI No. 04.01.01.06 and 04.01.01.07

- SAIFI is the System Average Interruption Frequency Index, which is the average number of interruptions experienced by a customer. It is measured as the average number of sustained interruptions per year for each customer served during the 12-month period ending with the indicated month. Sustained interruptions are 5 minutes or more in duration.
- SAIDI is the System Average Interruption Duration Index, which is the average interruption time (measured in minutes) experienced by a customer. It is measured as the average duration of sustained interruptions per year for each customer served during the 12-month period ending with the indicated month. Sustained interruptions are 5 minutes or more in duration.
- SAIFI and SAIDI reliability indices are being analyzed to assess maintenance and equipment replacement efforts to optimize system performance. Unanticipated outages can cost significantly in equipment damage, reduced revenue, costly lawsuits, and poor customer perceptions.
- SAIFI and SAIDI have to be combined together to accurately reflect the reliability performance of the distribution system.
- Updates to historical outage information during the preceding 12-month period may result in slight changes to SAIFI and SAIDI.
- Several high-profile outages in 2006 alerted LADWP's awareness in improving our reliability performance. LADWP requested Electric Power Research Institute (EPRI) to perform a distribution reliability study. The study outlined LADWP's reliability performance with detailed assessment of equipment maintenance, asset management, and project prioritization.
- As a result of this study, the Power Reliability Program (PRP) and Power System Reliability Program (PSRP) were enacted in 2007 and 2014, respectively, to assess LADWP's reliability performance through strategic replacement and maintenance of various assets. In addition to distribution assets, the PSRP expanded the infrastructure replacement to include generation, transmission, and substation assets.

2. CRITERIA

- Quantitative analysis of outage statistics to identify equipment failures which contribute to outage frequency and duration.
- Assessment of equipment failure trends to prioritize equipment replacement efforts and maintenance activities.

3. ACHIEVEMENTS

- Based on the System Reliability, Restoration, and Response (SR3) Report conducted by PA Consulting Group, LADWP's 5-Year Average SAIFI (excluding

Major Event Days) was ranked in the 1st quartile at 0.75 for Calendar Years 2014 to 2018 when compared to other investor-owned utilities.

4. ISSUES

- The reliability indices for March 2020 are SAIFI at 0.72 and SAIDI at 114.58 minutes.
- SAIDI has decreased since June 2019 because the outages caused by the major heat wave in July 2018 have since dropped off from the 12-month rolling data. However, SAIDI is higher than normal due to severe weather events causing outages for prolonged durations. There was a severe wind storm in April 2019, and heavy rainstorms and wind gusts in December 2019.
- More than 131,000 customers were affected during the April 9-11, 2019 wind storm, one of the worst wind storms impacting the power grid since 2011.
- Circuit Breaker (CB) failures, due to aging equipment and maintenance efforts continue to be a problem since 2014.
- Balloon-related outages are on a steady rise since 2014, with nearly 500 outages in 2017. Assembly Bill (AB) 2450 was introduced on February 14, 2018 and was approved by the Governor on September 5, 2018. AB 2450 requires manufacturers of metallic balloons to put a warning label that warns the consumer about the dangerous risk of fire if the balloon comes in contact with an electrical power line.

5. RECOMMENDATIONS

- Accelerate CB replacement as CB failures affect a large number of customers and have a cascading effect that could cause widespread collateral damage to other station equipment.
- Accelerate cross arms and underground cable replacement.
- Repair temporary fixes in a timely manner.

6. MANAGEMENT COMMENTS ON STATUS

- Replacement of aging assets will reduce the risks of outages due to their vulnerability during adverse weather conditions.

7. OUTREACH STRATEGY / PLAN

- The reliability indices can be accessed by the public via link <http://prp.ladwp.com>.
- LADWP has reached out to various Neighborhood Councils (NC), Neighborhood Associations (NA), and Homeowner Associations (HOA), including Westwood NC, Silver Lake NC, Venice NC, Palms NC, Crestview NA, Larchmont-Windsor Square, Bel Air-Beverly Crest NC, Doheny-Sunset NA, and Brookside HOA on reliability performance issues and improvement plans. LADWP has also conducted workshops for Key Accounts customers to educate them about our power reliability programs.

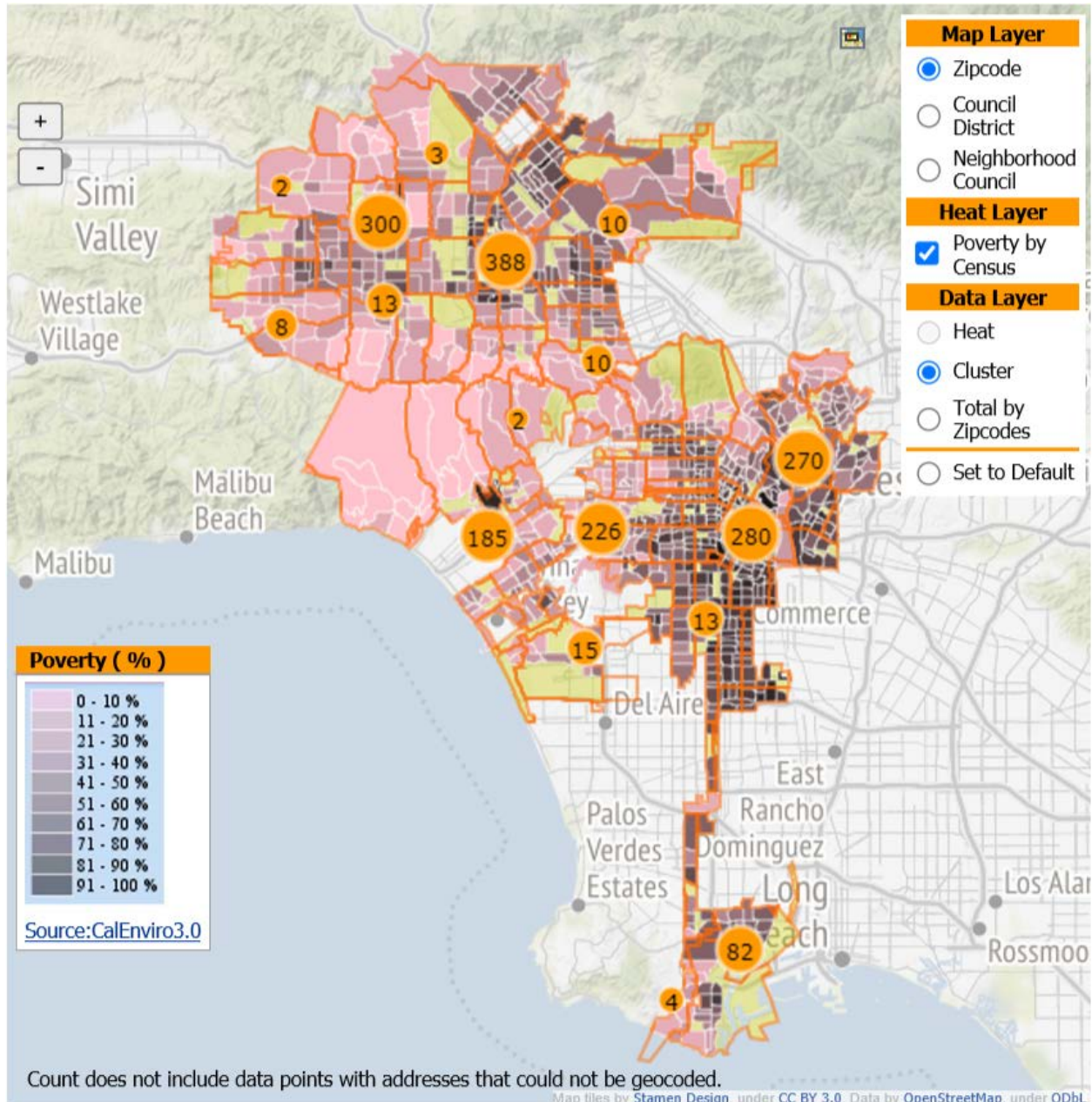
LADWP EMDI – Water & Power Infrastructure Investment

RESPONSIBLE MANAGER: Arthur Johnson

Reporting Period: Nov 2019 – Apr 2020

PSRP – Poles Replaced

The Department’s PSRP pole replacement work is done in compliance with California Public Utilities Commission (CPUC) General Order 165 – Inspection Cycles for Electric Distribution Facilities. Poles are identified for replacement through the Power System’s aggressive Inspection Program. The overhead power system has approximately 321,000 poles. By mapping the geographic location of these replacements against the Cal-Enviro 3.0 Poverty Indicator we can see both the geographic and demographic distribution of the Department’s pole replacement work. The numbers shown on the map are the number of poles replaced by geographic area



LADWP RATES/EQUITY METRIC – Pole Replacement (Power)

RESPONSIBLE MANAGER: Arthur Johnson, Power Transmission and Distribution
 EQUITY CORE CATEGORY: Water and Power Infrastructure Investment

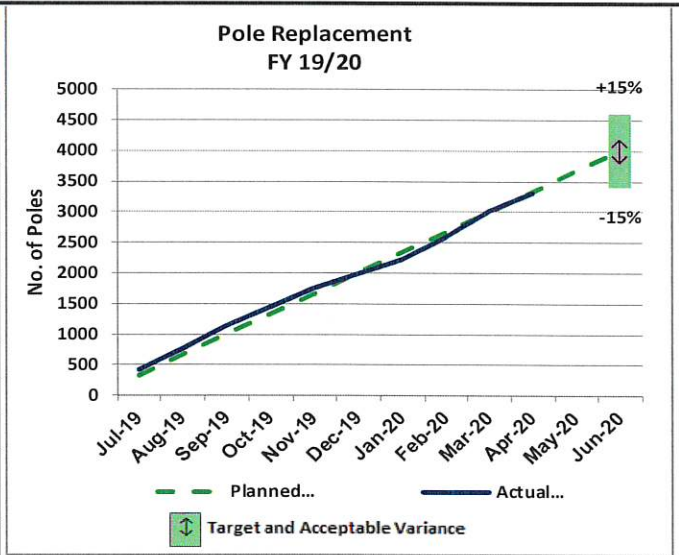
REPORTING PERIOD: April 2020

DEFINITION OF RATES METRIC: Number of Poles Replaced Against Plan

TARGET & ACCEPTABLE VARIANCE (FY 19/20): Target = 4,000; Acceptable Variance = ± 15%

STATUS: Within Acceptable Variance

FYTD as of:	Planned (No.)	Actual (No.)	Variance		Re-Estimate
			No.	%	
Jul-19	333	419	86	25.8%	
Aug-19	667	777	110	16.5%	
Sep-19	1,000	1,132	132	13.2%	
Oct-19	1,333	1,455	122	9.2%	
Nov-19	1,667	1,759	92	5.5%	
Dec-19	2,000	1,987	-13	-0.7%	
Jan-20	2,333	2,230	-103	-4.4%	
Feb-20	2,666	2,590	-76	-2.9%	
Mar-20	3,000	3,014	14	0.5%	
Apr-20	3,333	3,313	-20	-0.6%	
May-20	3,666				3,666
Jun-20	4,000				4,000
Acceptable Variance			± 15%		0.0%



SOURCE OF DATA: Jobs P6322 (KPI # 04.01.01.03)

1. BACKGROUND / PURPOSE

- Replace 4,000 deteriorated poles due to age or other damage. Power Transmission and Distribution (PTD) maintains approximately 321,000 poles in its system. These poles have an average life span of fifty years. These poles support switches, light fixtures, transformers, and underground cables transitioning to an overhead termination, communication cables, crossarms and conductors at different voltage levels. Work is completed by Distribution Construction & Maintenance (DC&M) district and contract crews. This work is required to maintain compliance with California Public Utilities Commission (CPUC) General Order 165- Inspection Cycles for Electric Distribution Facilities, and our Power System Reliability Program (PSRP).

vary month to month due to large jobs being closed on certain dates.

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.

2. CRITERIA

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

3. ACHIEVEMENTS / MILESTONES MET

- To date, the target was to replace 3,333 poles and the current actual number of poles replaced is 3,313.

4. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- The actual number of poles replaced is within the 15% threshold target. Replacements will

Within Acceptable Variance Outside Acceptable Variance Exceeds Target Needs Attention

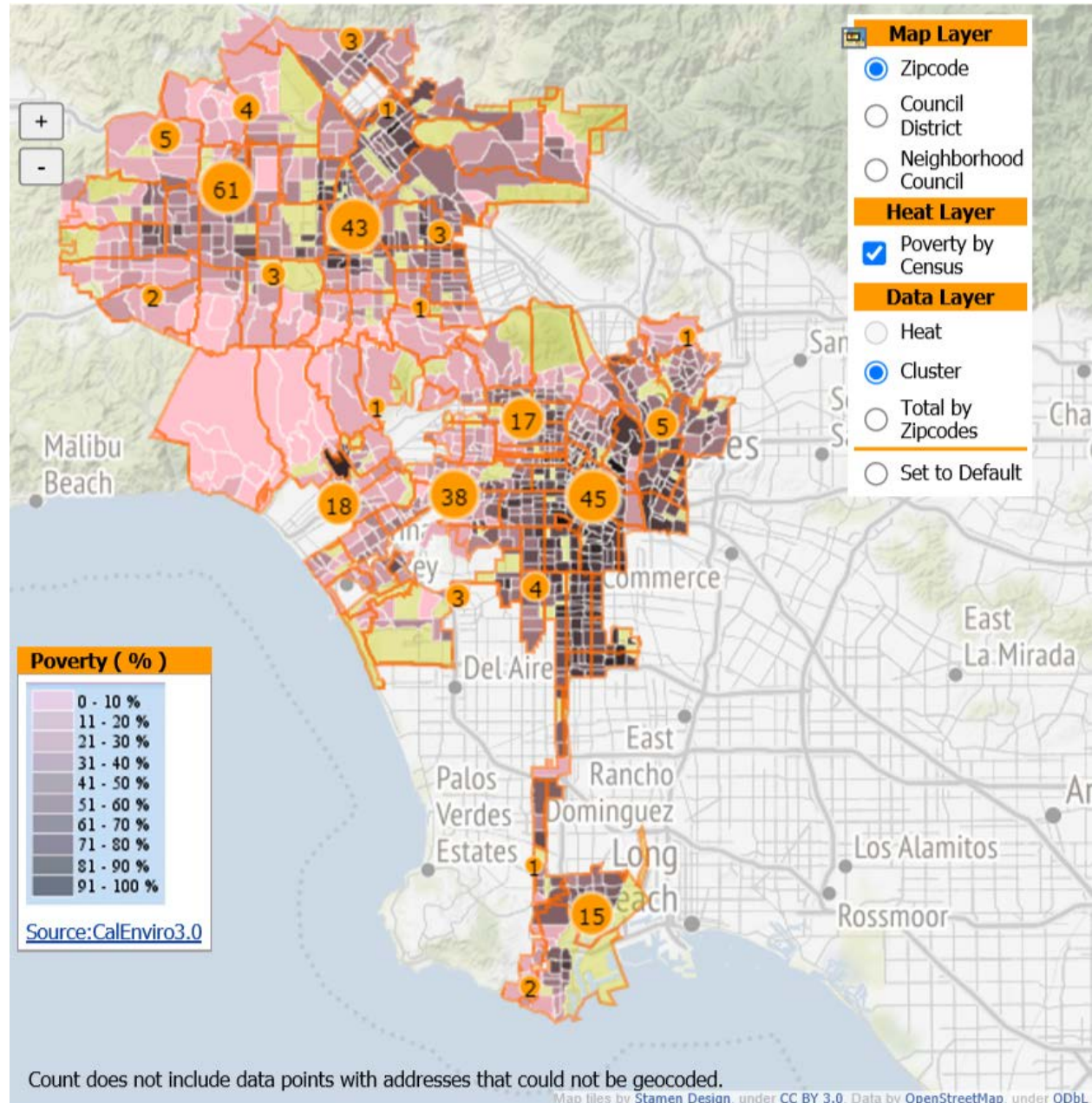
LADWP EMDI – Water & Power Infrastructure Investment

RESPONSIBLE MANAGER: Arthur Johnson

Reporting Period: Nov 2019 – Apr 2020

PSRP – Transformers Replaced

The Department’s PSRP transformer replacement work addresses reliability improvements by monitoring, reviewing, and inspecting over 126,000 transformers in service, and then replacing those that fail and are at highest risk of in-service failures. By mapping the geographic location of these replacements against the Cal-Enviro 3.0 Poverty Indicator we can see both the geographic and demographic distribution of the Department’s transformer replacement work. The numbers shown on the map are the number of transformers replaced by geographic area.



LADWP RATES/EQUITY METRIC – Transformer Replacement (Power)

RESPONSIBLE MANAGER: Arthur Johnson, Power Transmission and Distribution
 EQUITY CORE CATEGORY: Water and Power Infrastructure Investment

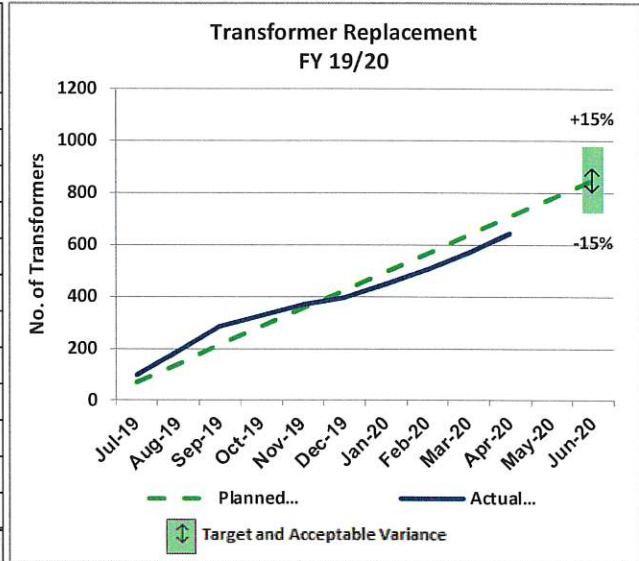
REPORTING PERIOD: April 2020

DEFINITION OF RATES METRIC: Number of Transformers Replaced Against Plan

TARGET & ACCEPTABLE VARIANCE (FY 19/20): Target = 850; Acceptable Variance = ± 15%

STATUS: Within Acceptable Variance

FYTD as of:	Planned (No.)	Actual (No.)	Variance		Re-Estimate
			No.	%	
Jul-19	71	97	26	36.6%	
Aug-19	142	189	47	33.1%	
Sep-19	212	284	72	34.0%	
Oct-19	283	327	44	15.5%	
Nov-19	354	367	13	3.7%	
Dec-19	425	398	-27	-6.4%	
Jan-20	496	447	-49	-9.9%	
Feb-20	566	501	-65	-11.5%	
Mar-20	637	567	-70	-11.0%	
Apr-20	708	643	-65	-9.2%	
May-20	779				779
Jun-20	850				850
Acceptable Variance			± 15%		0.0%



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

1. BACKGROUND / PURPOSE

- Replace 850 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 800 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.

3. ACHIEVEMENTS / MILESTONES MET

- To date, the target was to replace 708 transformers and the current actual number of transformers replaced is 643.

4. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION

- The actual number of transformers replaced is within the ±15% threshold.

5. MITIGATION PLAN AND / OR RECOMMENDATIONS

- PTD will continue to monitor and adjust the job as the year progresses to ensure we reach our goals.

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.

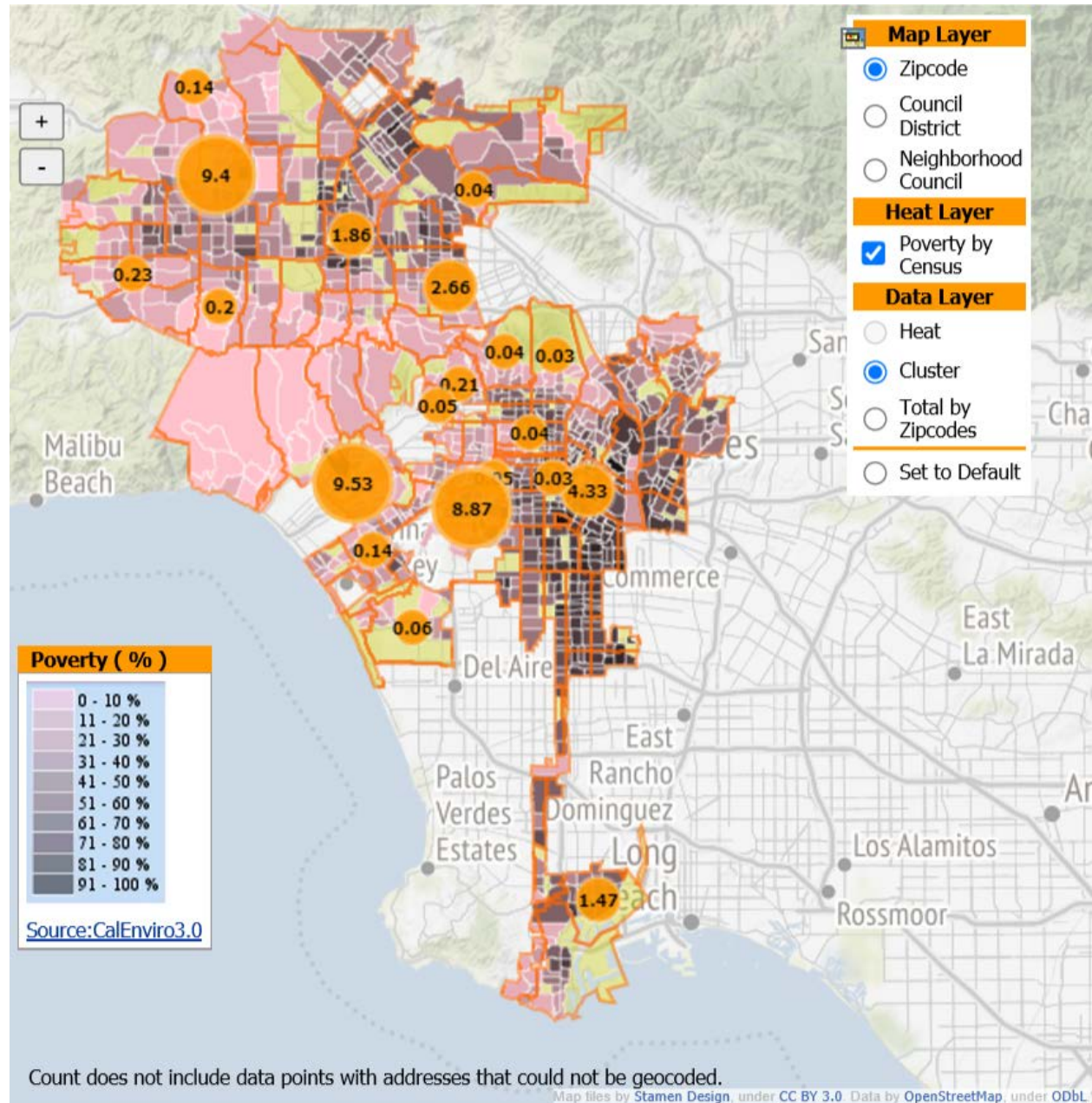
LADWP EMDI – Water & Power Infrastructure Investment

RESPONSIBLE MANAGER: Sager Farraj

Reporting Period: Nov 2019 – Apr 2020

PSRP – Cable Replaced

The Department’s PSRP cable replacement work addresses reliability improvements replacing cable that is at high risk of failure due to deterioration, overload, obsolescence, and damage. By mapping the geographic location of these replacements against the Cal-Enviro 3.0 Poverty Indicator we can see both the geographic and demographic distribution of the Department’s cable replacement work. The numbers shown on the map are the number of circuit miles of cable replaced by geographic area.



LADWP RATES/EQUITY METRIC – Cable Replacement (Power)

RESPONSIBLE MANAGER: Sager Farraj
Power Planning, Development, and Engineering Division

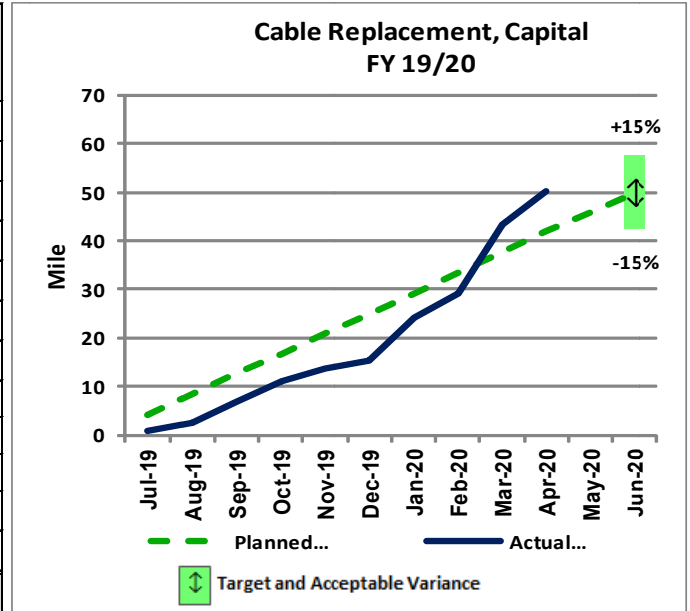
REPORTING PERIOD: April 2020

EQUITY CORE CATEGORY: Water & Power Infrastructure Investment

DEFINITION OF RATES METRIC: No. of Miles of Cable Replaced Against Plan
TARGET & ACCEPTABLE VARIANCE (FY 19/20): Target = 50 miles; Acceptable Variance = ±15%

STATUS: Exceeds Target

FYTD as of:	Planned (Mile)	Actual (Mile)	Variance		Re-Estimate
			Mile	%	
Jul-19	4.2	1.0	-3.2	-76.2%	
Aug-19	8.4	2.6	-5.8	-69.0%	
Sep-19	12.6	6.8	-5.8	-46.0%	
Oct-19	16.8	11.1	-5.7	-33.9%	
Nov-19	21.0	13.7	-7.3	-34.8%	
Dec-19	25.0	15.2	-9.8	-39.2%	
Jan-20	29.2	24.2	-5.0	-17.1%	
Feb-20	33.4	29.0	-4.4	-13.2%	
Mar-20	37.6	43.3	5.7	15.2%	
Apr-20	41.8	50.2	8.4	20.1%	
May-20	46.0				53.0
Jun-20	50.0				55.0
Acceptable Variance			± 15%		10.0%



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

1. NARRATIVE / BACKGROUND

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

2. CRITERIA

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

3. ACHIEVEMENTS

- Through the month of April, Distribution Construction & Maintenance completed 50.2 circuit-miles. The key performance goal is 50 circuit-miles for Fiscal Year 19/20.

4. PERFORMANCE/VARIANCE ANALYSIS & YEAR END PROJECTION

- Variance through the month of April is 8.4 circuit-miles, 20% above target. This is due to District crews closing the completed jobs in the system.

5. MITIGATION/RECOMMENDATION

- Ahead of schedule, no mitigation plan at this point.

6. OUTREACH STRATEGY / PLAN

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

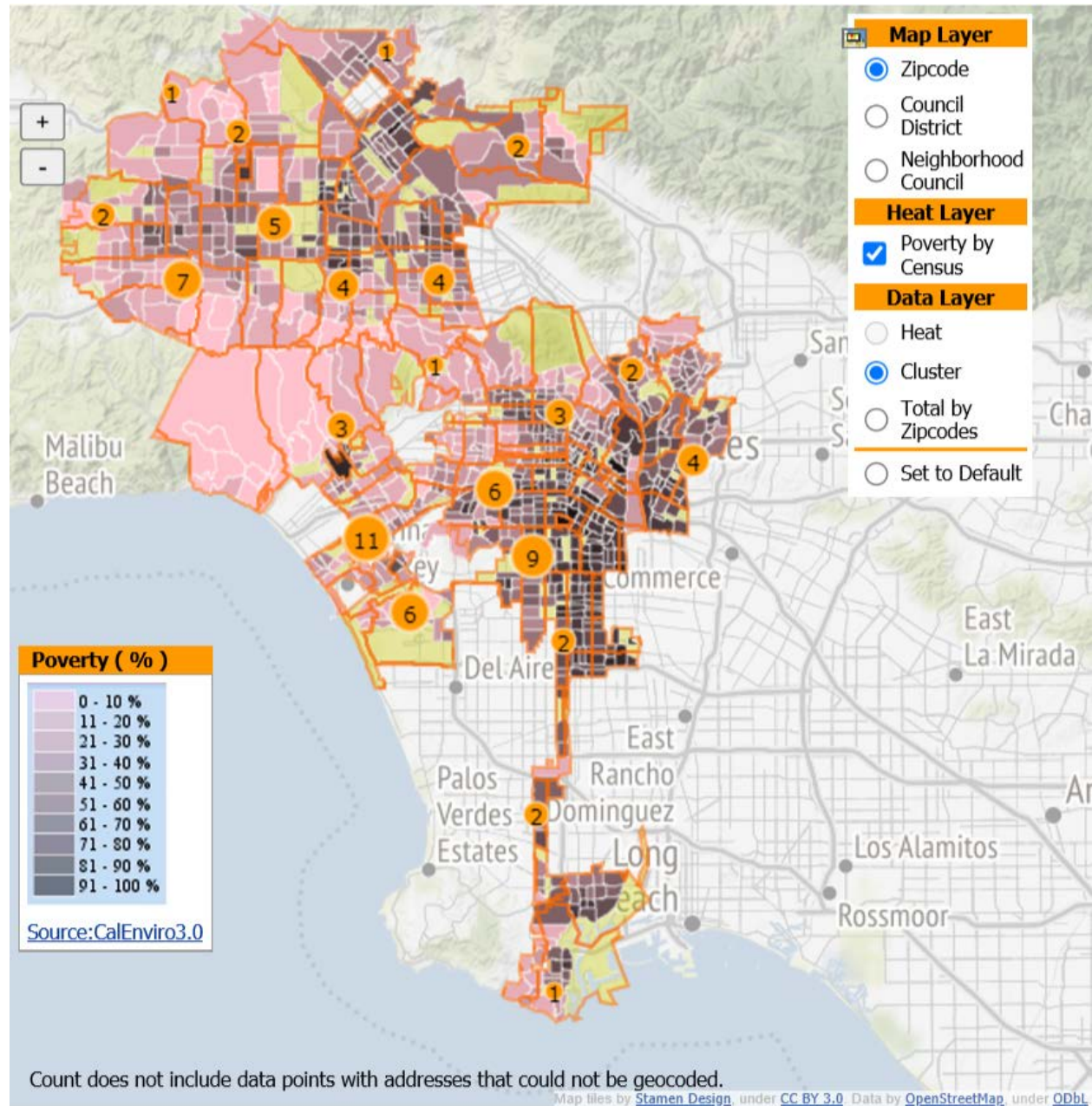
LADWP EMDI – Customer Incentive Program/Services

RESPONSIBLE MANAGER: Terrence McCarthy

Reporting Period: Nov 2019 – Apr 2020

Rain Barrel Rebates

LADWP provides residential customers rebates for up to two 50-gallon rain barrels or one cistern. The numbers shown on the map are the number of rebates provided by geographic area.



LADWP EQUITY METRIC – *Rain Barrel Cistern Rebates (Water System)*

RESPONSIBLE MANAGER: Terrence McCarthy 
EQUITY CORE CATEGORY:

REPORTING PERIOD: Nov 2019 – April 2020

1. NARRATIVE / BACKGROUND

On April 29, 2019, Mayor Garcetti announced a revised sustainability plan called the [Green New Deal](#). This plan tasked LADWP with sourcing 70% of water locally, inclusive of capturing 150,000 acre ft/yr of stormwater and reducing per capita potable water use by 25% (GPCD) by 2035.

2. CRITERIA

Rain Barrel and Cistern Rebate criteria:

- Customers receive a rebate for up to \$50/rain barrel (min 50 gals), limit 2
- Customers receive a rebate for up to \$500 per cistern (min 200 gals), limit 1

3. ACHIEVEMENTS

- Total Rebates
 - Rebated 141 rain barrels
 - Rebated 4 cisterns

4. ISSUES

- None

5. OUTREACH STRATEGY / PLAN

- LADWP encourages customers to purchase and install rain barrels and cisterns through offering rebates. We promote our rebate programs through community events, social media, etc. Customers can access a [video](#) on proper rain barrel installation on the Department's YouTube Sustainable Landscaping playlist.
- LADWP also partners with non-profit organizations and external organizations to promote sustainable landscaping practices, such as stormwater capture at Hands on Workshops, California Friendly Landscape Training classes, and Turf Removal classes.
- LADWP created a stormwater capture photo [gallery](#) on our California Friendly Landscaping website to assist customers in complying with sustainable landscaping rebate requirements.
- Through our One Water LA partnership, the Los Angeles Bureau of Sanitation (LASAN) promotes our rain barrel and cistern rebate program at their community events, social media, etc.

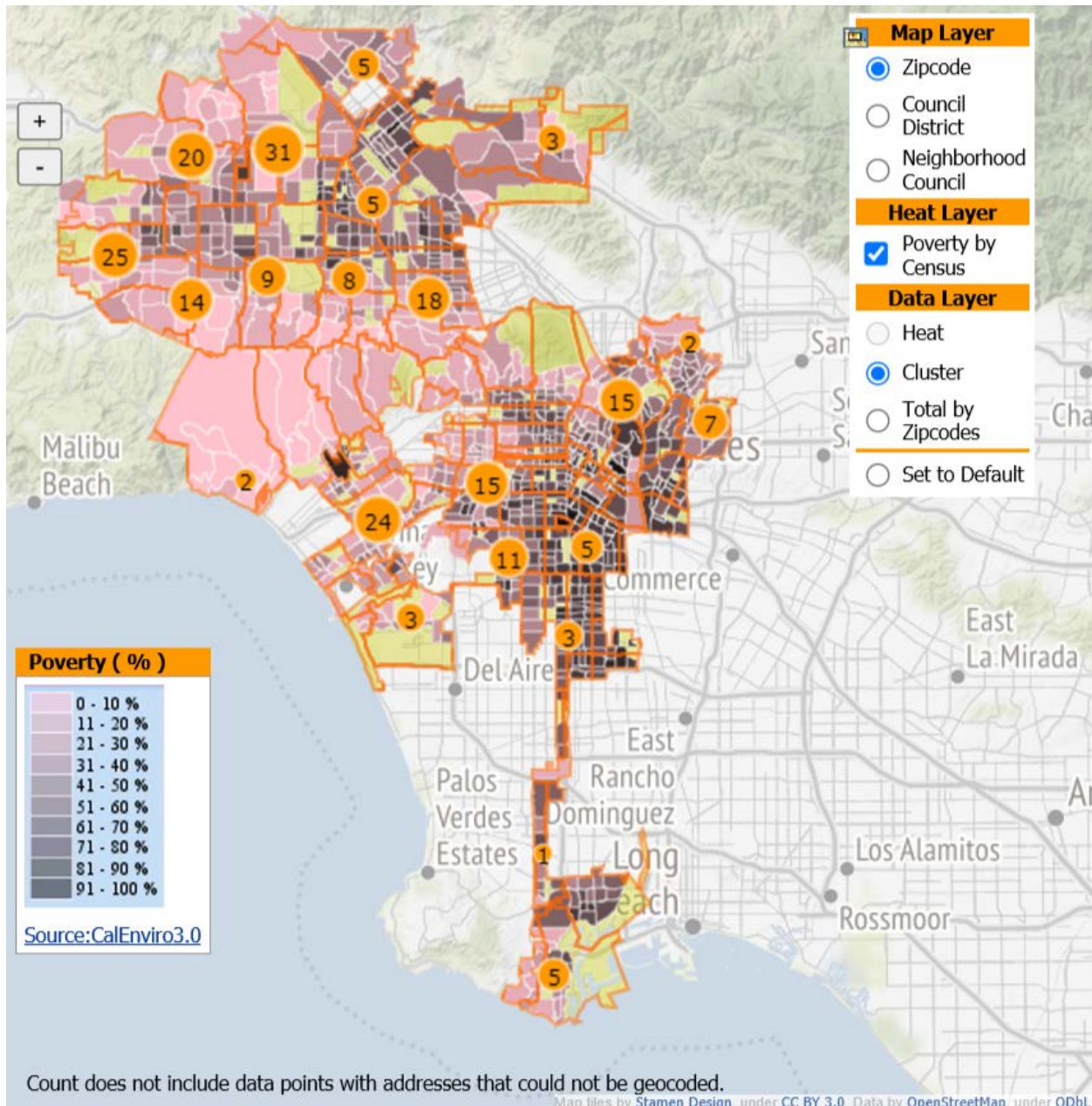
LADWP EMDI – Customer Incentive Program/Services

RESPONSIBLE MANAGER: Terrence McCarthy

Reporting Period: Nov 2019 – Apr 2020

Turf Removal Rebates

LADWP provides turf removal rebates to residential and commercial customers that replace turf with California Friendly and native plants. In addition to adding mulch, increasing permeability and grading to capture rainwater, customers are encouraged to create sustainable landscapes that maximize the benefits of the air, water, and soil relationship. The program is a great way for customers to save money and, more importantly, save water. The numbers shown on the map are the number of customers participating in the program by geographic area.



LADWP EQUITY METRIC – *Turf Removal Rebates (Water System)*

RESPONSIBLE MANAGER: Terrence McCarthy *Terrence McCarthy*
EQUITY CORE CATEGORY:

REPORTING PERIOD: Nov 2019 – April 2020

1. NARRATIVE / BACKGROUND

On April 29, 2019, Mayor Garcetti announced a revised sustainability plan called the [Green New Deal](#). This plan tasked LADWP with sourcing 70% of water locally, inclusive of capturing 150,000 acre ft/yr of stormwater and reducing per capita potable water use by 25% (GPCD) by 2035.

2. CRITERIA

- Residential Turf Removal Rebate:
 - \$3.00 per square foot (up to a maximum of 5,000 square feet)
- Commercial Turf Removal Rebate
 - \$3.00 per square foot for 250 to 50,000 square feet removed
 - \$1.00 per square foot for 50,001 to 7 acres removed

3. ACHIEVEMENTS

- Residential Turf Removed
 - 496,566 square feet of turf
- Commercial Turf Removed
 - 13,914 square feet of turf

4. ISSUES

- None

5. OUTREACH STRATEGY / PLAN

- In addition to providing continued messaging about the turf replacement rebate, LADWP sponsors community partnership grants for non-profit organizations to promote outdoor water conservation. Theodore Payne Foundation is the 2020 recipient of a grant that will provide sustainable landscaping maintenance classes to predominantly Spanish speaking, sole proprietor landscapers.
- LADWP intends to renew its successful series of [Hands on Workshops \(HOWs\)](#) through early 2021. HOWs educate customers on how to remove turf, grade for rainwater capture, install low water use plants, and convert to efficient drip irrigation. In addition to hands on experience, a complementary [workbook](#) is provided to attendees and customers that are interested in pursuing a turf replacement rebate.
- LADWP authorized work to provide free design services for the Landscape Transformation Design Services program. Customers that need help with planning their turf replacement project will receive a planting plan, irrigation plan and a low water use plant list.
- LADWP offers planting templates, individual plant profiles and virtual tours of sustainable landscaping. The newly added [Lawn-to-Garden Transformation Section](#) provides customers with design suggestions and installation instructions.

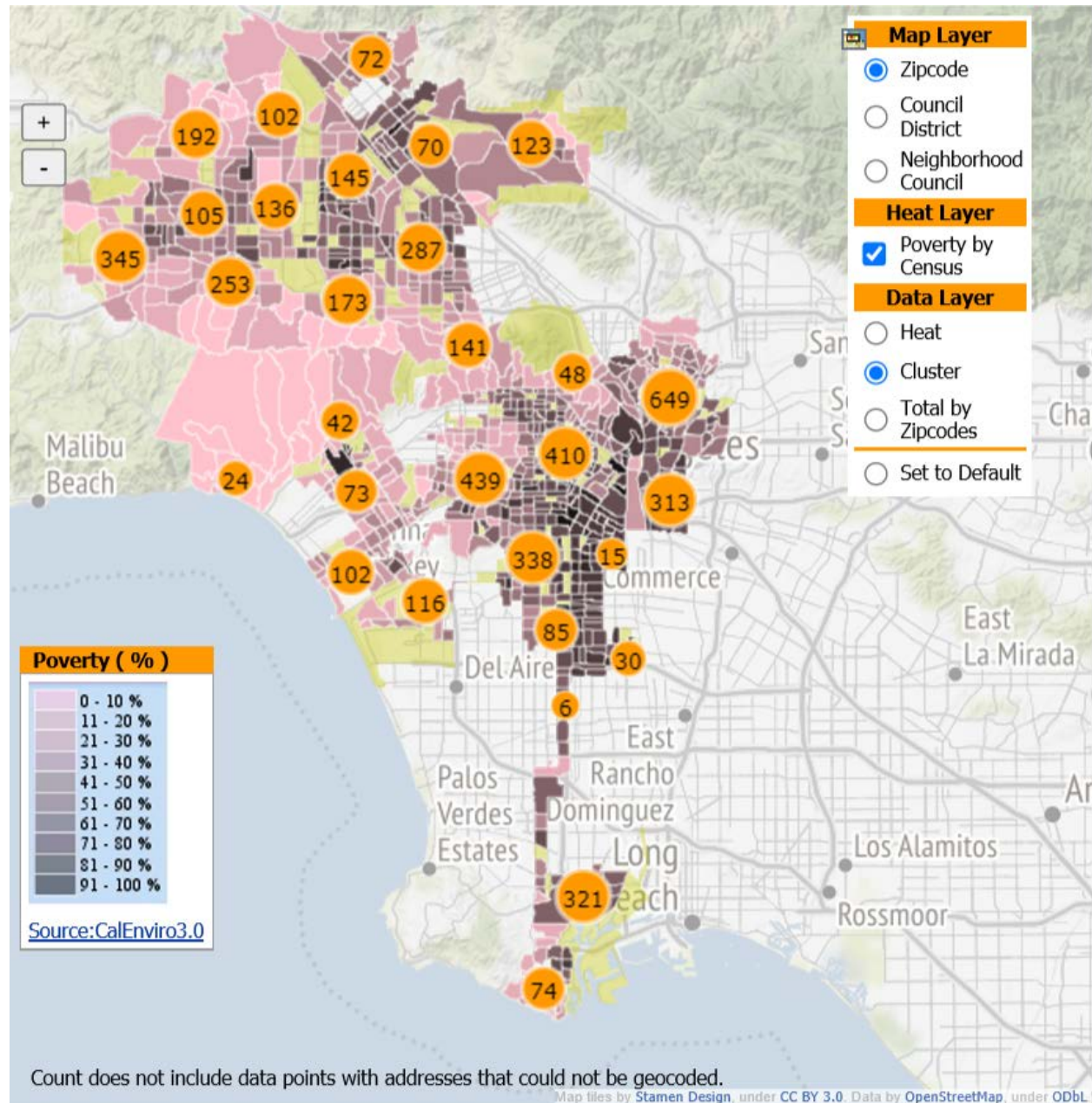
LADWP EMDI – Customer Incentive Program/Services

RESPONSIBLE MANAGER: Craig Tranby

Reporting Period: Nov 2019 – Apr 2020

Tree Program – City Plants

Continuing its extensive tree planting involvement since 1998, LADWP recently signed an agreement with the Los Angeles City Plants program to fund 42,000 additional trees to be planted throughout the City of Los Angeles over the next two years. City Plants addresses the low tree canopy cover in the City, which averages 21%, well below the national average of 27%. The numbers shown on the map are the number of trees planted by geographic area.



LADWP EQUITY METRIC – *Tree Program – City Plants (Joint)*

RESPONSIBLE MANAGER: Craig Tranby

REPORTING PERIOD: 11/19 – 4/20

EQUITY CORE CATEGORY: Customer Incentive Program/Services

1. NARRATIVE / BACKGROUND

This program is critical to achieving the cumulative 15 percent energy savings target for LADWP adopted by the Board, as it allows LADWP to partner with City Plants to prioritize and accelerate implementation of energy savings opportunities through tree planting. City Plants focuses on low-canopy communities, promoting healthy living and creating jobs. In addition, the LADWP partnership has focused on potential energy savings resulting from trees shading buildings.

2. CRITERIA

- City of Los Angeles residents and businesses are eligible for free trees
- Trees are selected and located to maximize energy savings and minimize water use
- Includes both street trees and yard trees
- Low canopy and low-income areas targeted
- Coordinates with LADWP Community Affairs and Council Offices to schedule distribution events in areas of need

3. GOALS AND PROGRESS

- 2019-21 MOU was approved in August 2019 and efforts outlined therein are well underway toward the distribution/planting of over 42,000 trees. About 12,000 trees have been distributed/planted through April.
- Program continues to leverage CalFire grants to fund watering, pavement cuts, and additional plantings. LA San and other planting partners have received grants in the most recent cycle.
- Energy savings of about 6 GWh annually

- Successful Arbor Day tree event in Wilmington before safer-at-home was enacted.

4. ISSUES

- Program retooling to accommodate social distancing and safety precautions. Successful conversion to virtual events for tree adoptions with follow-on tree delivery.
- Disease, particularly shothole borer related, remains a central concern among urban forest professionals. The local USFS research center continues to focus research on the problem and potential mitigations.
- Easy opportunities for placing trees have become less frequent. Additional marketing and data-driven efforts have begun, including Mayor-coordinated street tree campaign beginning in June.

5. OUTREACH STRATEGY / PLAN

- Developed new co-branded collateral and event materials with LADWP
- Coordination with LADWP efficiency programs, such as Home Energy Improvement Program, and outreach grantees
- Coordination with partners and elected offices
- Events
- Website/Social Media
- Advertising
- Canvassing

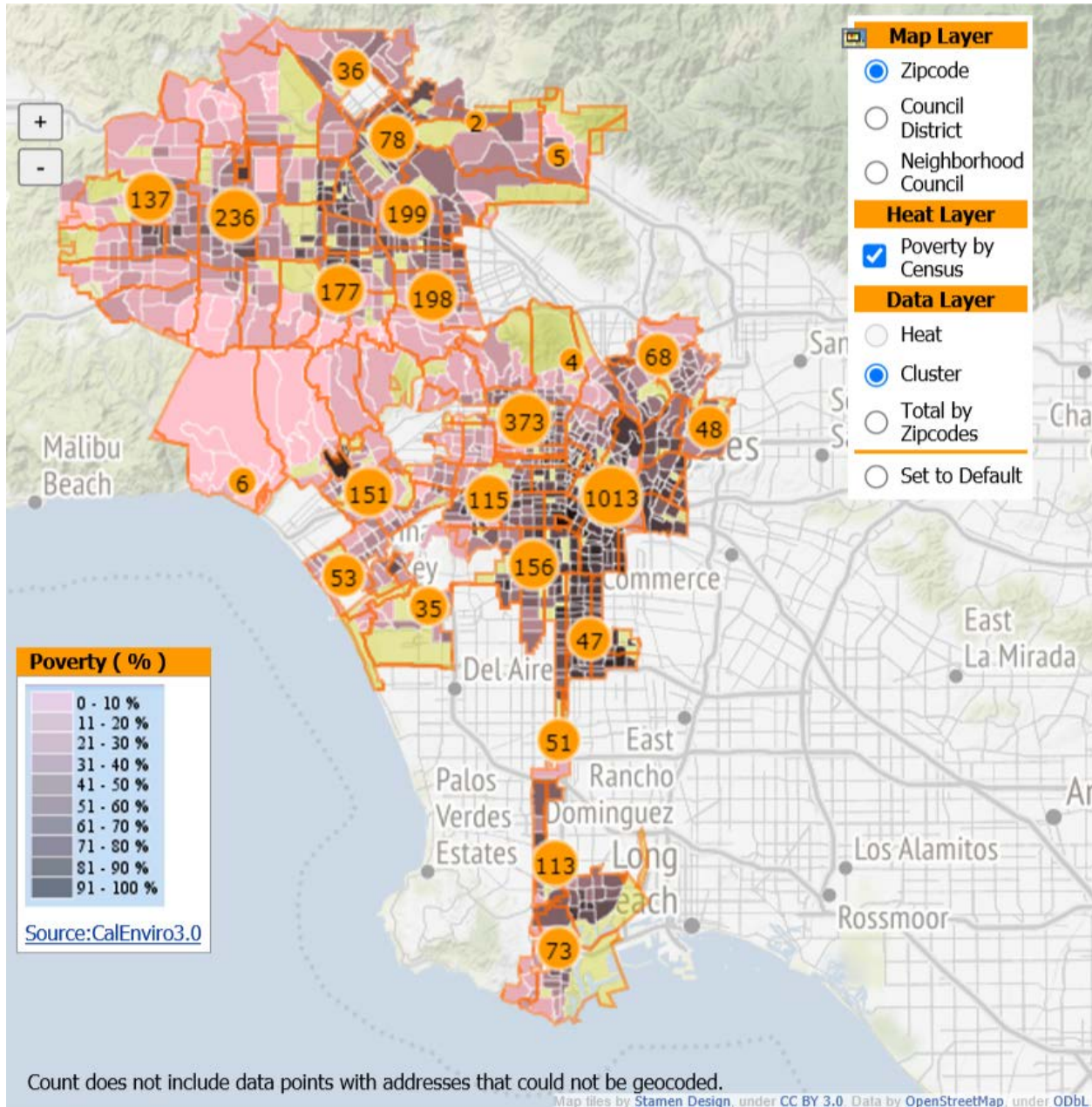
LADWP EMDI – Customer Incentive Program/Services

RESPONSIBLE MANAGER: Steven Starks

Reporting Period: Nov 2019 – Apr 2020

Commercial Direct Install

LADWP’s Commercial Direct Install Program is available to qualifying businesses whose average monthly electrical demand is 250 kilowatts (kW) or less. After an energy and water use assessment is made, energy and water saving equipment is installed at the business at no cost to the business owner. The numbers shown on the map are the number of commercial customers participating in the program by geographic area.



LADWP EQUITY METRIC – *Commercial Direct Install (Joint)*

RESPONSIBLE MANAGER: Steven Starks

REPORTING PERIOD: 11-01-19 through 04-30-20

EQUITY CORE CATEGORY: Customer Incentive Programs EQ KPI ID 14

1. NARRATIVE / BACKGROUND

The direct install program offers qualifying LADWP business customers free lighting and water efficiency upgrades resulting in a reduction of utility costs, electricity and water use, while improving operational efficiency. LADWP partners with the Southern California Gas Company (SCG) to offer a tri-resource efficiency program aiming to reduce the use of electricity, water and natural gas.

2. CRITERIA

- Target market is commercial customers
- LADWP electric account holder in good account status
- Monthly usage 250kW or lower

3. GOALS and PROGRESS

FY 19/20 (11-01-19 through 04-30-20)

- Savings 30,170,307 kWh
- Savings 5,654 kW
- Savings 2,703 HCF
- 3,106 businesses completed

Goal: Prior to COVID-19, CDI had excellent results of savings and installations completed. CDI's goal for FY 20/21 is to resume the program and set an average installation goal of 423 businesses completed per month.

Projection:

- Savings 45,255,461 kWh
- Savings 8,481 kW
- Savings 4,055 HCF
- 4,659 installations completed

Assumption:

- Revamping of CDI only requires one month
- Returning sub-contractors familiar with CDI and the approved lighting measures
- Willingness of businesses participating during the pandemic

Progress: To achieve this goal, sub-contractors released will be recruited to return to the program. Increase marketing and enrollment efforts by our contractors' personnel. Emphasize efforts toward the small business customers greatly impacted by the pandemic.

4. ISSUES

- Expectations of business customers (wanting services that the program does not offer)
- Projects that do not meet the established cost effectiveness requirements
- Restarting the program from the temporary suspension due to COVID-19
- Reassuring our customers that proper safety protocols will be observed by staff at all times when performing work under the program

5. OUTREACH STRATEGY / PLAN

- Outbound Canvassing - Existing Community Based Organizations (CBO) and other community organizations market the program and its availability to LADWP business customers
- Flyers – Program flyers are distributed via outbound canvassing, community events support, and any other appropriate outreach channel likely to build program awareness
- Website – Program information in English and Spanish is available on the LADWP website

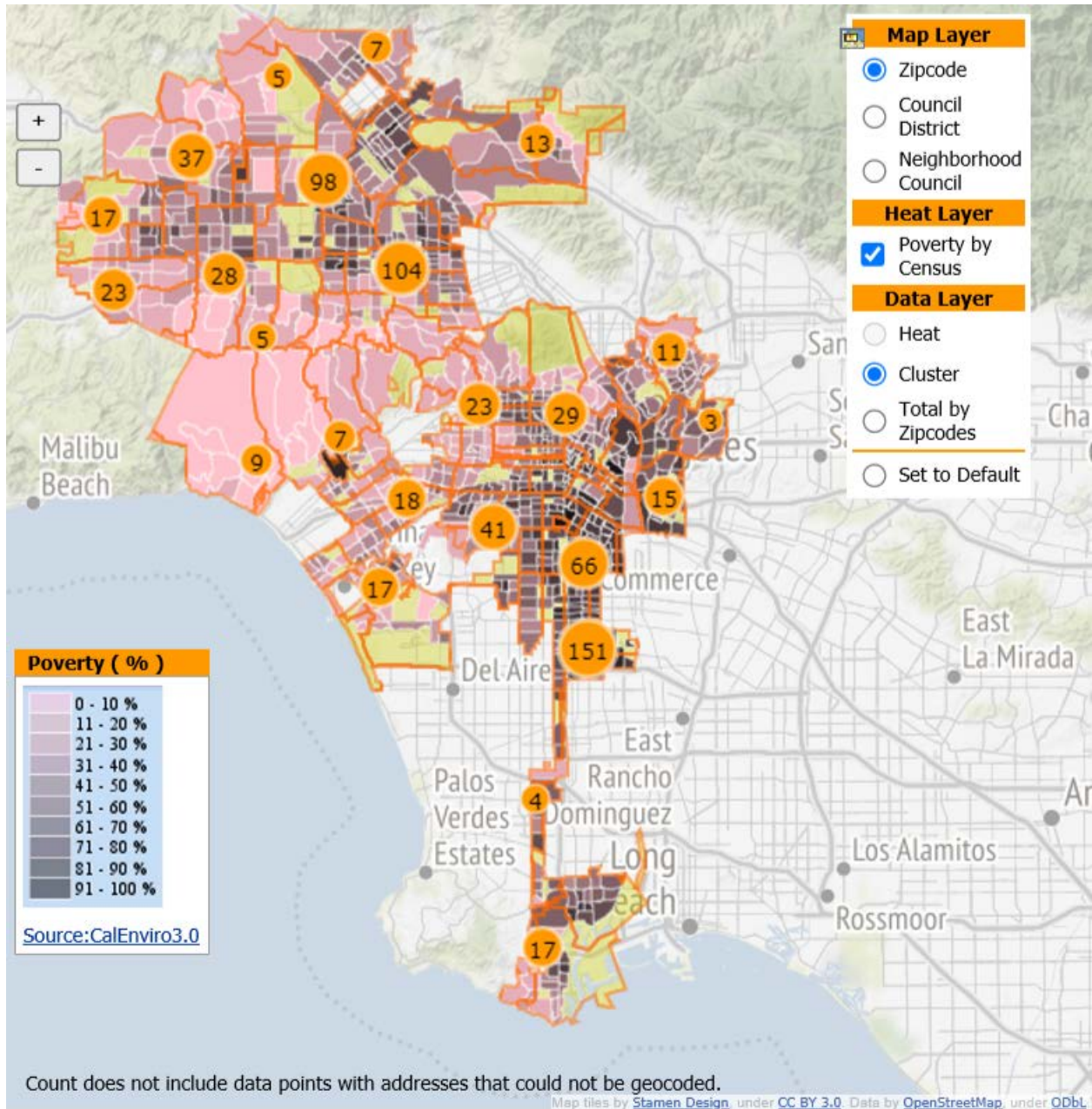
LADWP EMDI – Customer Incentive Program/Services

RESPONSIBLE MANAGER: Steven Starks

Reporting Period: Nov 2019 – Apr 2020

Home Energy Improvement Program

The Home Energy Improvement Program (HEIP) offers LADWP residential customers the opportunity to improve the energy and water performance in their homes, which can improve their comfort level and potentially reduce their energy and water cost. The numbers shown on the map are the number of residential customers participating in the program by geographic area.



LADWP EQUITY METRIC – *Home Energy Improvement (Joint)*

RESPONSIBLE MANAGER: Steven Starks
EQUITY CORE CATEGORY: Customer Incentive Programs EQ KPI ID 8

REPORTING PERIOD: 11-01-19 through 04-30-20

1. NARRATIVE / BACKGROUND

The direct install whole-house program offers LADWP residential customers free lighting and water efficiency upgrades to improve the home's envelope and core systems. The program is not limited to low-income customers; however the priority is to serve LADWP's neediest customers. LADWP partners with the Southern California Gas Company (SCG) to offer a tri-resource efficiency program aiming to reduce the use of electricity, water, and natural gas.

2. CRITERIA

- Target market is residential customers
 - Single Family Homes
 - Multi-Residential Properties
- LADWP electric account holders

3. GOALS and PROGRESS

FY 19/20 11-01-19 through 04-30-20:

- Savings 1,080,607 kWh
- Savings 9,701 HCF
- 792 installations completed

Goal: HEIP's goal for FY 20/21 is to resume the program and set an average fiscal year installation goal of 362 MR units achieved from two to four unit properties and the enrollment of three to four mid to large size apartment buildings.

Goal: FY 20/21 HEIP's Single Family (SF) Homes would maintain standard program goals while focus is directed toward the MR units. An average monthly installation of 136 SF homes would continue to be achieved.

Projection:

- Savings 2,472,848 kWh
- Savings 22,186 HCF
- 1,994 installations completed

Assumption:

- Staffing resources of LADWP Power, Construction, and Maintenance (PCM) Staff and Utility Pre-Craft Trainees (UPCTs)
- Receptiveness of Multi-Residential Property Owners, Single Family Homeowners, and Tenants during the pandemic

Progress: FY 19/20 (11-01-19 to 04-30-20, 108 of the 792 installation completed were MRs. Having a separate MR application and targeting the property owner, the goal set for FY 20/21 for increasing the number of units installs completed is expected to be achieved.

4. ISSUES

- Trust – Reassuring our customers the services and products provided are free
- Landlord refusal to allow participation
- Low participation in multi-residential buildings
- Condition of the home (Asbestos, Mold, Hazardous Material, etc.)
- No Saturday field appointments
- Staff shortage with the HEIP Field Team causes delay in scheduling assessments and completing installations
- Restarting the program from the temporary suspension due to COVID-19
- Reassuring our customers that proper safety protocols will be observed by staff at all times when performing work under the program

5. OUTREACH STRATEGY / PLAN

- Direct Mail – Mail batches are created according to council districts and zip codes and delivered to our vendor for mailing
- Flyers – Program flyers are distributed via direct mail, utilized for community events

support, and any other appropriate outreach channel likely to build program awareness

- Website – Program information is in English and Spanish, including both HEIP and HEIP Multi-Residential Applications are available on the LADWP website
- Hotline – A toll-free program hotline and email address is available for customers to have access with HEIP personnel
- Program Outreach & Community Partnership Program – Some of the grantees that participate in the POCP program provide services to hard-to-reach customers that help them participate in the program

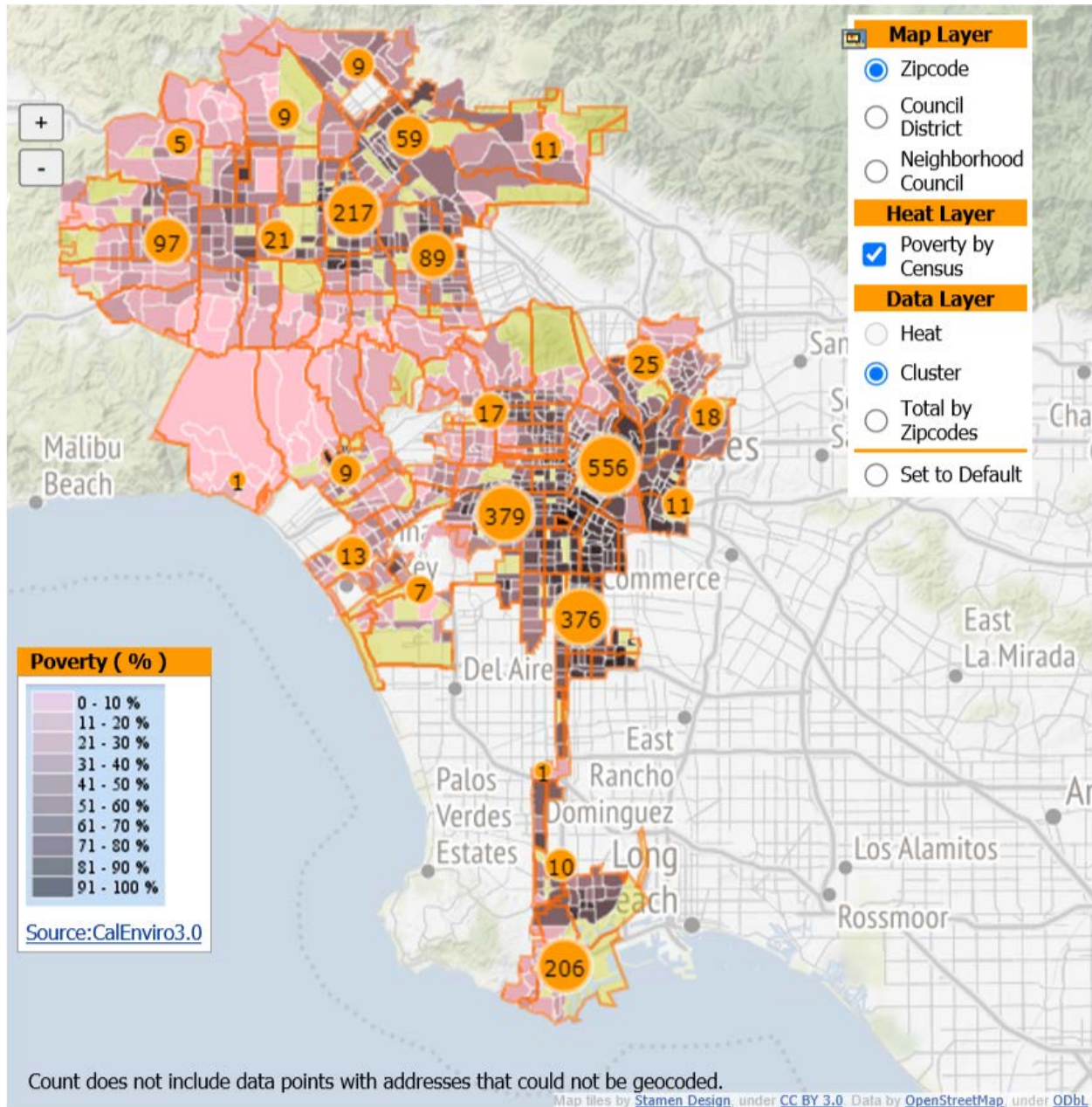
LADWP EMDI – Customer Incentive Program/Services

RESPONSIBLE MANAGER: Steven Starks

Reporting Period: Nov 2019 – Apr 2020

Refrigerator Exchange Program

The LADWP's Refrigerator Exchange Program provides new energy-saving, ENERGY STAR® rated refrigerators in exchange for qualified older model refrigerators, free of charge. The numbers shown on the map are the number of refrigerators provided by geographic area.



LADWP EQUITY METRIC – *Refrigerator Exchange Program (Joint)*

RESPONSIBLE MANAGER: Steven Starks

REPORTING PERIOD: FY 19-20 (11/2019 to 04/20)

EQUITY CORE CATEGORY: Customer Incentive Programs/Services

1. NARRATIVE / BACKGROUND

Refrigerator Exchange Program (REP) is a free refrigerator replacement program designed to target customers that qualify on either LADWP's Low-Income or its Senior Citizen/Disability Lifeline Rates. The program was expanded to include the following entities, multi-family and mobile home communities, civic, community, faith-based organizations as well as educational institutions. This program leverages a 3rd Party Contractor, ARCA (Appliance Recycling Centers of America), to administer the delivery of the program and provides energy efficient refrigerators for these customer segments to replace older, inefficient, but operational models.

2. CRITERIA

a) Targeted Sectors:

- Residential
- Multi-family
- Nonprofit

b) Program Qualifications:

- Must be a LADWP customer in good standing
- Be a LADWP residential customer on the Low Income or Lifeline Discount rate or
- Be a qualifying multi-family unit in which the property owner owns the refrigerator unit or a mobile home community
 - Multi-Family Property must be owned or rented in accordance with policies for Affordable Housing in use by the Los Angeles Housing Department, or
 - A minimum of 50% of residents must be income qualified or
- Be a qualified:
 - Civic Organization
 - Community Organization
 - Faith-Based Organization
 - Educational Organization

c) Unit Criteria:

- In order to qualify the unit must meet the following criteria:
 - Located in the LADWP service territory
 - Owned by qualified recipient
 - Be at least 10 years old
 - A minimum of 14 cubic feet
 - In working condition
 - Used as the primary unit
 - Be plugged into a properly grounded outlet

d) Market Penetration:

- As of April 30, 2020, there were approximately 211,945 customers who are receiving services on a qualifying rate schedule (low income or lifeline) who may have qualifying units.

3. GOALS AND PROGRESS

- Since program inception, May 1, 2007 to April 30, 2020, a total of 134,443 refrigerators were exchanged for a savings of 108,198,884 kWh.
- Goal: Collaborate with Marketing and Communications team to create a program specific marketing plan which targets MUDs as well as increases program awareness.
 - Progress: Draft plan created. Plan is currently being revised to take into account possible modifications due to concerns regarding the spread of COVID 19.
 - FY 20-21 Goal: Finalize marketing plan, present to the Board, and implement.
- Goal: Initiate and complete a direct mail postcard campaign to promote program awareness to customers (on qualified rate, who may have qualifying units, who have not participated in the program); 148,000 customers have been identified.
 - Progress: 111,000 out of 148,000 total customers received program

information. Direct mailing campaign was temporarily halted as a result of the program being suspended.

- FY 20-21 Goal: Identify potential customer pool, initiate, and complete direct mail and postcard campaign to all qualified customers.
- Goal: Initiate a re-engagement marketing campaign to increase participation within Multi-Unit Dwellings, MUDs, that are rented in accordance with Low-Income and Affordable Housing policies.
 - Progress: Thru this engagement 793 MUDs were engaged, 69 have been completed, totaling 2058 units exchanged.
 - FY 20-21 Goal: Identify and engage 10 MUDs per month – 120 MUDs/yr.
- Goal: Exchange 3,960 units from November 1, 2019 to April 30, 2020
 - Progress: Exchanged 1,684 units for the specified time frame; unable to reach participation goal as program was closed from January 1, 2020 to January 27, 2020 (due to contract renewal) and was suspended again from March 19, 2020 until present (due to concerns regarding the spread of COVID 19)
 - FY 20-21 Goal: Exchange 5,250 units

4. ISSUES

- Program was suspended March 19, 2020 due to concerns regarding the COVID 19. It is uncertain if customer demand for the program will remain the same as it was prior to the suspension or decrease due to concerns regarding the spread of the virus.
- Lack of individual customer awareness of program
- Lack of multi-family property awareness of the program
- Trust, customer's skepticism of free offering

- Increased difficulty in achieving energy savings targets as the program matures, as the majority of the older refrigerators have been exchanged. The average age of refrigerators being exchanged continues to decrease, which lowers the savings realized from program participation (refrigerators manufactured 1993 and earlier consume significantly more energy than those manufactured after 1993)
- Program Inconveniences:
 - Customer must coordinate and be present for two separate site visits, pre-inspection and delivery
 - Refrigerator provided doesn't come with additional features i.e. ice maker, in door water dispenser, etc.
 - No color options

5. OUTREACH STRATEGY / PLAN

- Continued Marketing Campaigns via,
 - Reengagement of previous program applicants that ultimately cancelled their participation prior to receiving a new unit.
 - Direct Mailing
 - Customer Service Events
 - Bill On-serts
 - E-mail Blast
 - CBOs
 - Neighborhood Council Newsletters
 - Community Events
 - Social Media Networks (Facebook, Twitter, etc.)
 - Additional Marketing, as appropriate
- Use of program to educate customers on energy efficiency and of the added expense an environmental impacts of both inefficient and possessing additional refrigerators and/or freezers

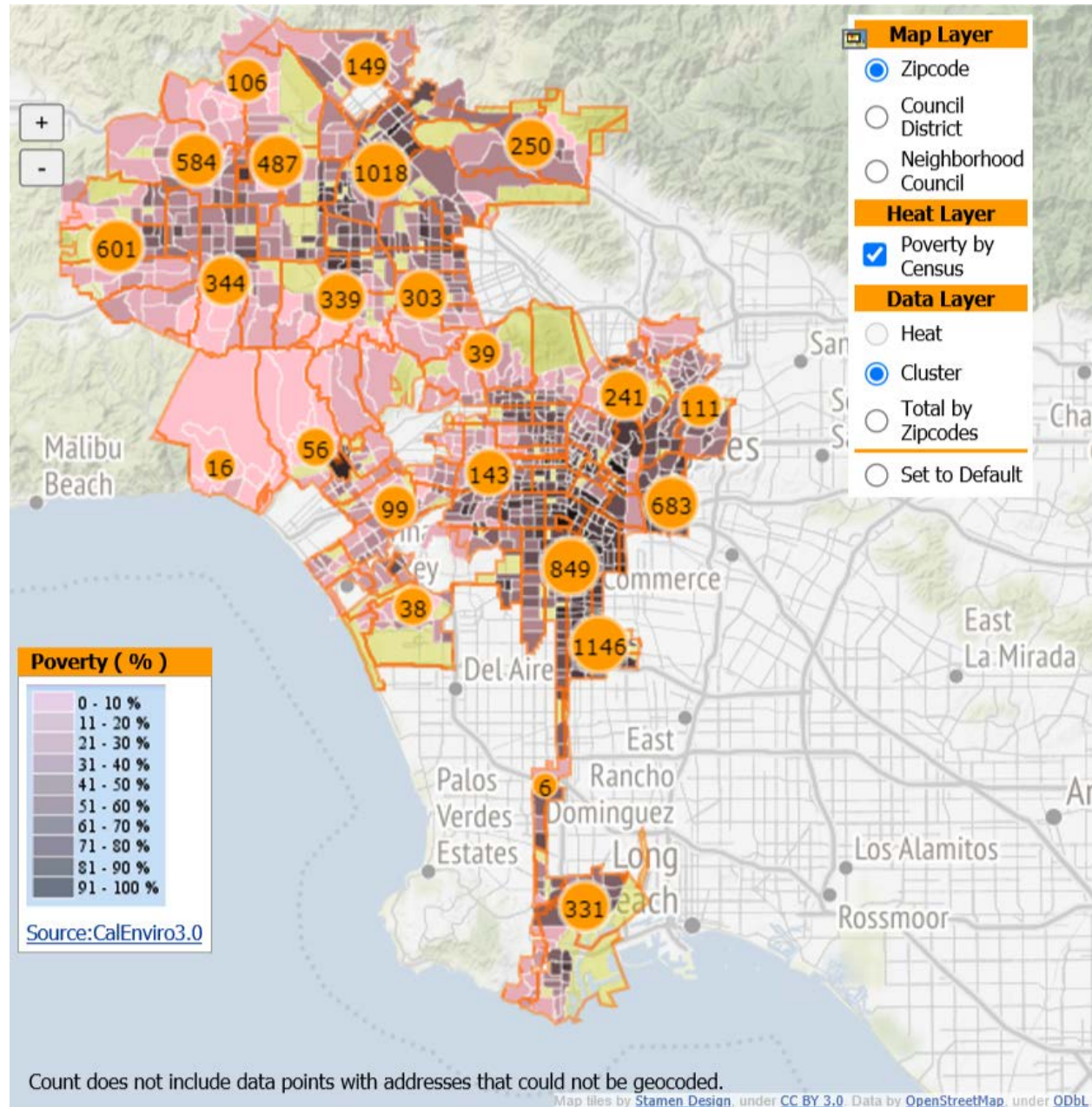
LADWP EMDI – Customer Incentive Program/Services

RESPONSIBLE MANAGER: Victoria Black

Reporting Period: Nov 2019 – Apr 2020

Consumer Rebate Program

LADWP offers the Consumer Rebate Program (CRP) to our residential customers to promote the use of energy-efficient products. This program is designed to both educate and encourage LADWP residential customers to purchase and install qualifying products in their home. The numbers shown on the map are the number of rebates provided by geographic area.



LADWP EQUITY METRIC – *Consumer Rebate Program (Joint)*

RESPONSIBLE MANAGER: Victoria Black
EQUITY CORE CATEGORY: Customer Incentive Program

REPORTING PERIOD: 11-1-19 – 4-30-20

1. NARRATIVE / BACKGROUND

The Consumer Rebate Program (CRP) encourages LADWP residential customers to purchase and install qualifying energy efficient products in their home. The CRP offers rebates on comprehensive energy efficiency measures, including whole house solutions, performance standards and opportunities for integration. The CRP rebates reduces the cost for customers who need to purchase either a single measure or multiple measures by encouraging the adoption of energy-efficient choices when purchasing and installing household equipment. This is carried out by offering customers educational materials about energy efficiency options, rebates and other incentive offerings.

2. CRITERIA

- Target market is all residential and multi residential customers
- Customers who purchase and install qualifying equipment are eligible to participate

3. GOALS AND PROGRESS

Goal: Encourage the use of energy efficient options for certain home improvements, such as Attic Insulation. By keeping program active and incentive levels static during the current economic situation, we expect a slight increase in rebate payments which we anticipate will result in payment of 11,000 rebates.

Progress: For FY 19/20, the program has exceeded the projected participation, budget, and energy savings goals

Progress: Paid 10,488 rebates with energy savings of 5.0 GWh in FY19/20 (11-01-19 through 04-30-20)

Goal: Build a staff capable of processing and paying rebates submitted by our residential customers, in a timely and efficient manner.

Hire and train 2 Utility Service Specialist-B's and 1 USS-A by 11/1/2019.

Progress: Moving forward with the hiring package for the bid that was paused due to COVID-19 for USS –B's. Expect to conduct interviews July 2020.

Goal: Maintain production at 95% to 105% percent of pre-COVID 19 levels through the implementation of the LADWP Telecommuting Agreement.

Progress: Developed & Implemented the Consumer Rebate Unit Telecommuting Plan allowing the program to exceed pre Covid-19 production levels despite working restrictions, by enabling staff to perform most 80% of their tasks while telecommuting via VPN

Progress: Rebate payments still on-track despite COVID-19 restrictions. Worked closely with Accounts Payable to maintain rebate payments at a monthly average of \$2.4 million dollars.

Goal: Increase awareness of equity to disadvantaged communities through Consumer Rebate Program offerings. We project total participation in the program to be 17,140 applications.

Income qualified customer participation rate of 16%.

Progress: For period 5.1.19 through 10.31.19 overall program participation was 11,403 applications. Of that total 12% were low income/lifeline customers.

For the current reporting period of 11.1.19 through 4.30.20 overall program participation was 14,284. Of that total, 14% were low income/lifeline customers.

Progress: Developed a pilot ad-hoc report to provide Low Income/Lifeline customer participation statistics in the Attic Insulation Rebate Program

Goal: Create a seamless customer service experience for customer inquiry and

participation across the primary customer support channels.

Train 82 Service Center employees on Customer Rebate Program components, processes, and customer support requirements.

Progress: Continuing to develop and fine tune our relationship with the Program Support team to assist with phone calls and emails

Goal: Complete the manuals of standard practice and visual sample application packages for the two remaining measures: Whole House Fan and Windows, by 10/15/2020.

Progress: Continued development of manuals of standard practice for processing Consumer Rebate Program staff

Progress: Continued development of visual sample application packages and provided to participating contractors and customers to mitigate processing delays and reduce documentation resubmittals

Goal: Increase low income customer awareness to increase participation.

Work with Public Affairs and Customer Service to develop an email and mail campaign targeting low income customers 1/1/2021.

Progress: Collaborate with new Income Qualified Customer Program team to develop strategies to increase awareness and participation through outreach

4. ISSUES

- Need for an automated customer notification system for the purpose of expediting response to customer inquiries for applications submitted by mail and email
- High number of incomplete applications from customers
- Significant delays in adding staff to address increased rebate application volume
- Need for customer workshops to assist them in completing rebate applications
- Need for educational workshops for contractors to assist with criteria needed for application packet submission
- Need for all measures to be fully integrated into the online application option

5. OUTREACH STRATEGY / PLAN

- Current outreach strategy to increase customer awareness of the program consists of utilizing LADWP website, email blast, customer contact, service center, Consumer Rebate Program staff, trade events, and LADWP sponsored events
- Specific targeted outreach efforts for low income communities with cooperation from non-profit and community based organizations
- Future outreach strategy may include partnering with big box stores to promote rebate-eligible products
- Increase presence in more vendor and trade show events to market our program to a greater spectrum of LADWP customers

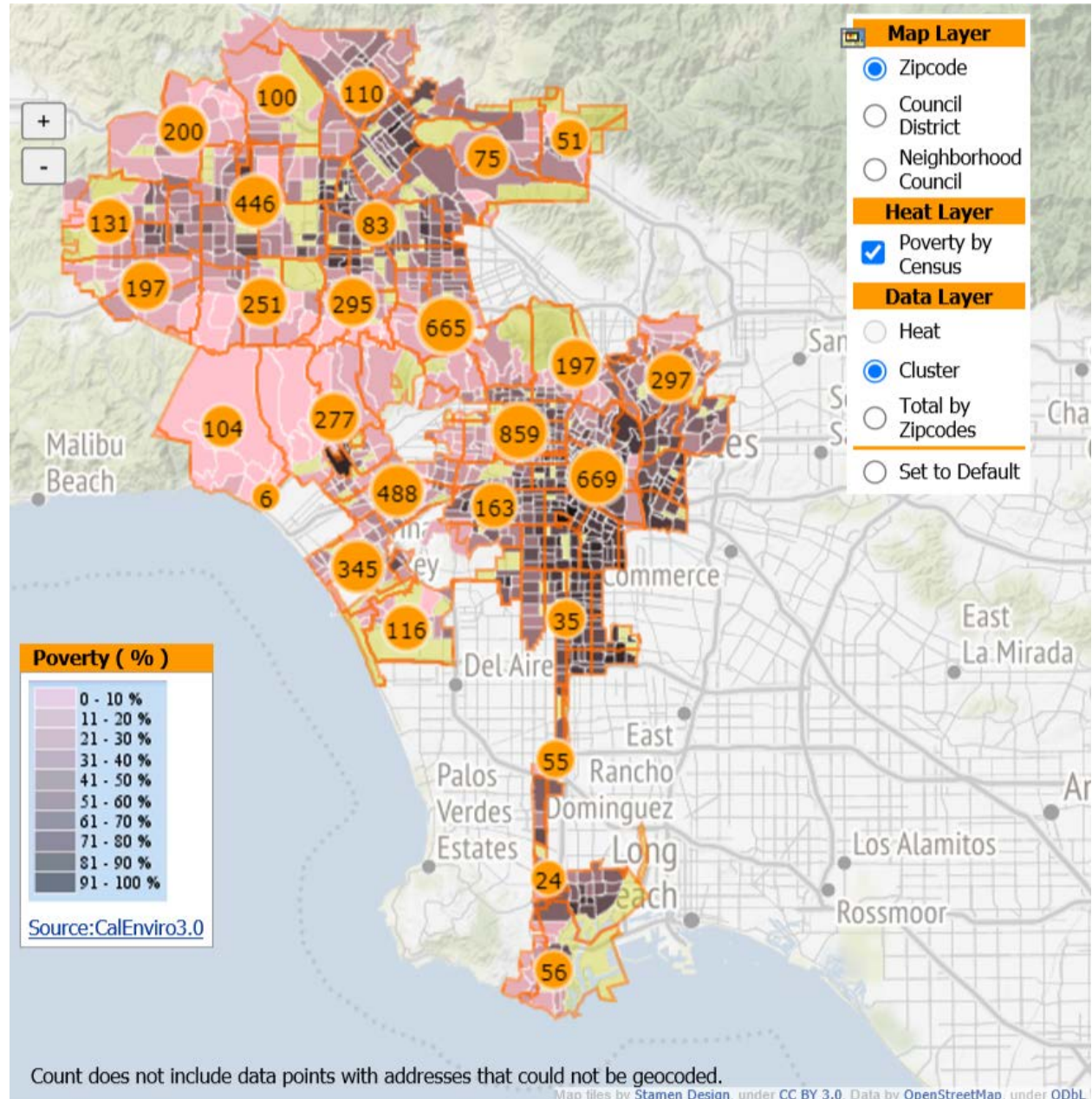
LADWP EMDI – Customer Incentive Program/Services

RESPONSIBLE MANAGER: Scott Briasco


Reporting Period: Nov 2019 – Apr 2020

Electric Vehicle Infrastructure

In support of LA’s Sustainable City pLAn 2019 and LADWP’s Clean GRID LA plan, the Electric Transportation Program seeks to promote the adoption of electric vehicles (EV) in the City of Los Angeles and to ensure EV charging infrastructure is distributed equitably throughout the City of Los Angeles in collaboration with other City Department and State Agencies. Infrastructure Goal: 10,000 commercial charges in the City of Los Angeles by 2022 through the Los Angeles Department of Water and Power’s (LADWP) Charge-Up LA! As of Apr 2020, there were 4,111 EV Charging Stations installed.



LADWP EQUITY METRIC – *Electric Vehicle Infrastructure (Power)*

RESPONSIBLE MANAGER: Scott Briasco 
Power Planning, Development, and Engineering Division
EQUITY CORE CATEGORY: Customer Incentive Programs/Services

REPORTING PERIOD: April 2020

1. NARRATIVE / BACKGROUND

Source data: Jobs M5014, M5015, M5020, M5021, and P6059 (KPI No. 05.03.03.04)

- In support of LA's Sustainable City pLAn 2019 and LADWP's Clean GRID LA plan, the Electric Transportation Program seeks to promote the adoption of electric vehicles (EV) in the City of Los Angeles and to ensure EV charging infrastructure is distributed equitably throughout the City of Los Angeles in collaboration with other City Departments and State Agencies.
- This program will facilitate EV adoption and usage to support LADWP's Integrated Resource Plan (IRP). According to LADWP's IRP, accelerating transportation electrification is the most impactful component of reducing overall Green House Gas (GHG) emissions.
- Infrastructure Goal: 10,000 commercial chargers in the City of Los Angeles by 2022 through the Los Angeles Department of Water and Power's (LADWP) *Charge-Up LA!* Rebate Program. This includes public, workplace, and multi-unit dwelling (MUD) chargers. Of those chargers, 4,000 will be on City property.
- Off-peak charging is encouraged through Time of Use (TOU) rates. LADWP is planning to develop a residential smart EV charging pilot to incentivize customers not on the TOU rate to charge at off-peak times. However, priority was given to launching new DC Fast Charging and Medium/Heavy-Duty Rebates, delaying the development of the smart charging pilot. Third party options are being explored to launch a smart charging rewards pilot by Q2 2020.
- Promote EV adoption through incentives, customer education, outreach, and "ride and drive" events.

- Provide positive customer experience to encourage purchasing an EV through a seamless and positive process.
- Minimize impact to the Distribution System.

2. CRITERIA

- Install, or support the installation of, EV charging stations including public, workplace, and fleet chargers at City and LADWP locations using a combination of rebates and funds from the sale of Low Carbon Fuel Standard (LCFS) credits.
- Residential: LADWP's residential EV charger rebate program provides residential customers up to \$500 per installed charger and an extra \$250 for a dedicated TOU meter.
- Commercial: LADWP's commercial Level 2 EV charger rebate program provides commercial customers up to \$5,000 per installed charger for up to 40 chargers per property. The rebate amount was increased as of July 1, 2018. This applies to public, workplace, and multi-unit dwellings (MUD). In August 2019, LADWP launched DC Fast Charging rebates for light-duty EVs up to \$75,000 depending on the power output of the charging station. Medium/Heavy-Duty rebates were also launched for equipment to charge Class 3 through Class 8 EVs providing up to \$125,000 depending on the power output of the charging station. Rebate Terms and Conditions determine eligibility
- Used EV: LADWP's Used EV rebate pilot program provides residents in LADWP service territory up to \$1,500 towards the purchase of a qualifying used electric vehicle or plug-in hybrid electric vehicle.
- Collaborate with all LA City agencies, creating partnerships which enable the installation of more EV chargers through a combination of grants, rebates, and LCFS funds.

- Administer agreements between third party EV Supply Equipment (EVSE) service providers and LADWP properties.
- Site selection for the installation of new EV chargers are made based on an evaluation of electrical capacity, available parking, and operational considerations. Sites located in CalEnviroScreen designated as disadvantaged communities are given greater priority where possible.

3. ACHIEVEMENTS

Charger Installations*:

FYTD as of:	Target	Actual	Variance		Re- Estimate
			Unit	%	
19-Jul	191	268	77	40%	
19-Aug	381	427	46	12%	
19-Sep	572	633	61	11%	
19-Oct	763	1334/1340 ⁺	571/577 ⁺	75%/76% ⁺	
19-Nov	953	1531/1653 ⁺	578/700 ⁺	61%/73% ⁺	
19-Dec	1144	2264/2386 ⁺	1120/1242 ⁺	98%/109% ⁺	
20-Jan	1334	2597/2712 ⁺	1263/1378 ⁺	95%/103% ⁺	
20-Feb	1525	2933/3019 ⁺	1408/1494 ⁺	92%/98% ⁺	
20-Mar	1716	3307	1591	93%	
20-Apr	1907	4111	2204	116%	
20-May	2097				
20-Jun	2288				

*This table counts charger installations that LADWP has supported either through direct installs or incentives. It is the sum of installations that were completed by LADWP crews and those that were incentivized by LADWP EV charging station rebates (Residential and Commercial) this Fiscal Year.

Rebates Issued**:

FYTD as of:	Used EV	Residential	Commercial	Total
19-Jul	14	21	216	251
19-Aug	73	58	328	459
19-Sep	102	101	491	694
19-Oct	102	255	1037/1043 ⁺	1394/1400 ⁺
19-Nov	124	366/482 ⁺	1123/1129 ⁺	1613/1735 ⁺
19-Dec	165/196 ⁺	459/575 ⁺	1763/1769 ⁺	2387/2540 ⁺
20-Jan	230/266 ⁺	613	2052	2895/2931 ⁺
20-Feb	233/374 ⁺	644/688 ⁺	2204/2266 ⁺	3081/3308 ⁺
20-Mar	409/410 ⁺	725	2504	3638/3639 ⁺
20-Apr	586	871	3118	4575
20-May				
20-Jun				

** Attachment A indicates the quantity of rebates issued and total charging stations rebated per zip code.

4. ISSUES

- The EV program was approved for seventeen (17) positions in FY 18/19. Fourteen (14) positions have been filled.
- An electronic application was launched for the Used EV Rebate Program in November 2019 to improve customer experience in applying for the Used EV rebate. Due to the success of this, an electronic application for the Residential EV Charging Station Rebate is in development to be launched in July 2020. In addition, new upgrades to website content and flow for customer ease of use are in development for the 3rd Quarter of calendar year 2020.
- Some LA City Departments do not budget for EV maintenance, resulting in neglected faulty chargers. This creates a negative EV experience.
- Some customers cannot afford to front the initial cost of charger installations.
- Vandalism remains an issue in some areas.
- Used EV rebate program has had limited participation at \$450 and was increased to \$1,500 in November 2019 to encourage participation.

5. OUTREACH STRATEGY / PLAN

- Outreach efforts include print collateral in customer centers, website content, social media posts, ride and drives and community events.
- EV program information will continue to be presented at neighborhood council meetings and at various community and business events.
- LADWP participates in a minimum of 4 major EV Events including the National Drive Electric Week, LA Auto Show, and various other ride and drive events.
- LADWP will continue to participate in at various community events to promote electric transportation.
- The in-person outreach events have been put on hold in compliance with the COVID-19 stay at home orders. The program staff are exploring other avenues for outreach such as virtual engagements and webinars with various community groups.

+Data from October 2019 through February 2020 is displayed as prior number/new number. There were discrepancies in previous month's actuals. To provide the most accurate data, amounts in the Charger Installations and Rebates Issued tables were adjusted. Discrepancies sometimes occur when changes are made to rebate orders that are retroactively dated.

- Membership in CalETC, CalStart, and Veloz to develop and implement critical incentives for our customers such as state EV rebates, and HOV lane access.
- Support legislation and policy through CalETC, CalStart, and Veloz to promote EV adoption.
- Customers can access LADWP's EV Rebate Program through LADWP.com/EV. Website improvements to be developed for an improved user experience.
- Improve outreach/public education portion of the Program through targeted marketing and a regional website working with other utilities and Original Equipment Manufacturers (OEMs). Outreach is done partially with the regional effort, and partially with LADWP Communications, Marketing & Community Affairs.
- Work with agencies to market Air Quality Management District's (AQMD) modified Rule 2202 to support EV charging.
- Participate in the LA City EV Task Force to promote charging infrastructure installations on other City properties.
- Develop a marketing and educational outreach plan by Q2 2020 to increase participation in disadvantaged communities (DACs) for the Used EV Rebate program.
- The Electric Transportation Group is developing a revised Residential EV charging station rebate program to include an additional rebate amount to cover the installation costs of the charger and an additional incentive for the installation of L2 EV chargers in multi-family dwellings.

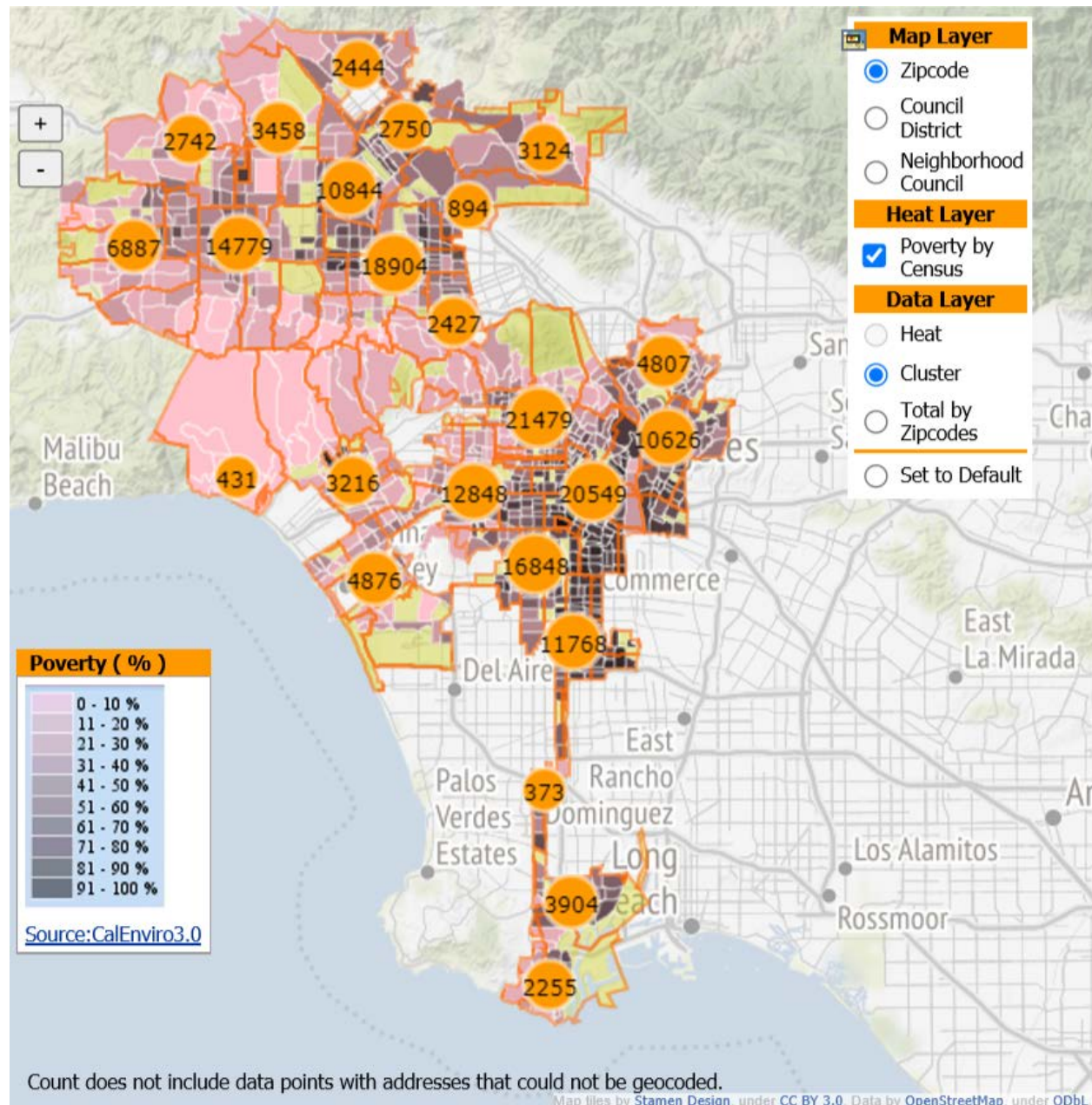
LADWP EMDI – Customer Incentive Program/Services

RESPONSIBLE MANAGER: Vacant – Assistant Director, Billing

Reporting Period: Nov 2019 – Apr 2020

Lifeline Discount Program

Lifeline Program: LADWP has partnered with the City of Los Angeles Office of Finance to offer customers who are 62 years of age or older or permanently disabled a discount on their electric and/or water bills. The program customers receive subsidies of \$17.71 per month (\$35.42 bi-monthly) for electricity and of \$10.00 per month (\$20.00 bi-monthly) water. Renters paying for electric service only, are eligible to receive the low-income water subsidy credit. These programs are designed to make water and electricity more affordable for qualifying customers. The numbers shown on the map are the number of commercial customers participating in the program by geographic area.



LADWP EQUITY METRIC – *Lifeline Discount Metric*

RESPONSIBLE MANAGER: Vacant – Assistant Director, Billing
EQUITY CORE CATEGORY:

REPORTING PERIOD: FY 2019-2020

1. NARRATIVE / BACKGROUND

LADWP has partnered with the City of Los Angeles Office of Finance to offer customers who are 62 years of age or older or permanently disabled a discount on their electric and/or water bills. The program customers receive subsidies of \$17.71 per month (\$35.42 bi-monthly) for electricity and of \$10.00 per month (\$20.00 bi-monthly) water. Renters paying for electric service only, are eligible to receive the low income water subsidy credit. These programs are designed to make water and electricity more affordable for qualifying customers.

2. CRITERIA

- 1) Residential customer within the City of Los Angeles
- 2) Either
 - a. Senior Citizen - 62 years of age or older, or
 - b. Disabled Citizen
- 3) Combined adjusted gross household income of less than \$41,800 for the prior calendar year

**Applications are submitted directly to the City of Los Angeles Office of Finance.*

3. ACHIEVEMENTS

- As of October 2019, there are approximately 94,178 participants enrolled in the program
- The Office of Finance periodically reviews and increases the adjusted gross household income amount based on cost of living.

4. ISSUES

- Online application submission process can be challenging

5. OUTREACH STRATEGY / PLAN

Lifeline Applications can be obtained by the following:

- Mailed via contact with Customer Contact Center
- Online at LADWP.com and FINANCE.LACITY.org (available in both English and Spanish)
- Local community outreach events and at any of the 15 Customer Contact Centers
- Call Contact Center employees assist customers with program questions.

Future Plan:

- Increase outreach through governmental agencies
- Increase use of newer technology for faster application submission and approval.

LADWP EMDI – Customer Incentive Program/Services

RESPONSIBLE MANAGER: Vacant – Assistant Director, Billing

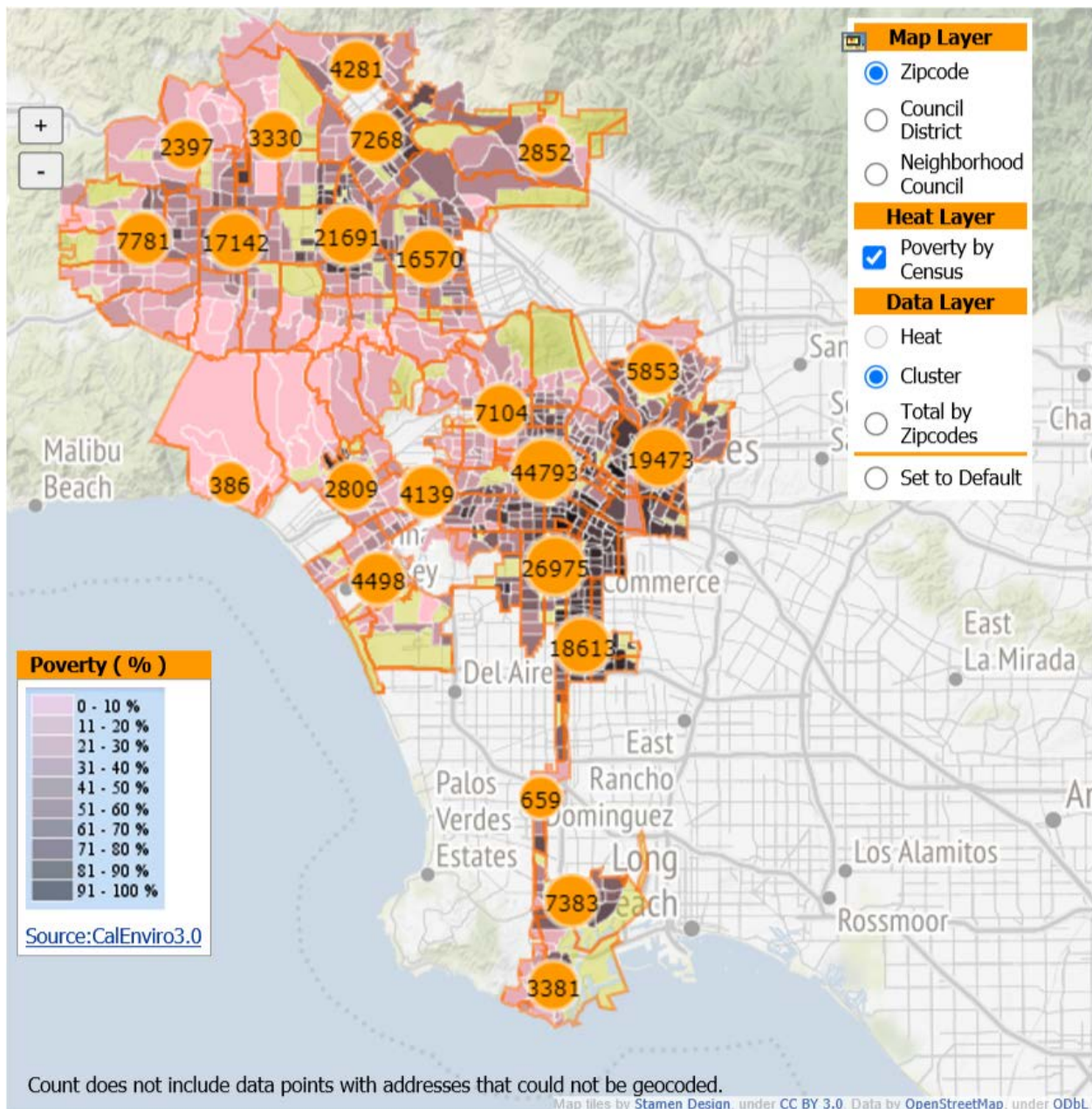
Reporting Period: Nov 2019 – Apr 2020

Low Income Discount Program

Low Income Program: Customers may qualify to have a discount applied to their electric and/or water bills based on their income and household size. Household Income Requirements Effective July 1, 2019. The numbers shown on the map are the number of customers participating in the program by geographic area.

Income Guidelines - Effective July 1, 2019 to June 30, 2020

Household Size	Income Eligibility Upper Limit	Household Size	Income Eligibility Upper Limit
1 to 2	\$33,820	6	\$69,180
3	\$42,660	7	\$78,020
4	\$51,500	8	\$86,860
5	\$60,340	Each Additional Person	\$8,840



LADWP EQUITY METRIC – *Low Income Discount Metric*

RESPONSIBLE MANAGER: Vacant – Assistant Director, Billing
EQUITY CORE CATEGORY:

REPORTING PERIOD: FY 2019-2020

1. NARRATIVE / BACKGROUND

Since 1991, LADWP has offered a residential discount Low Income Discount rate, for customers with qualifying income levels. Program customers receive subsidies of \$8.17 per month (\$16.34 bi-monthly) for electricity and \$5.00 per month (\$10.00 bi-monthly) for water, increased by a \$1.00 per month for additional occupants above three up to \$10.00 a month. Renters paying for electric service only, are eligible to receive the low income water subsidy credit. The total annual Low Income subsidy may range from \$158 to \$218. This is designed to make water and electricity more affordable for qualifying customers.

2. CRITERIA

Income Guidelines*	
Household Size	Income Eligibility Upper Limit
1-2	\$33,820
3	\$42,660
4	\$51,500
5	\$60,340
6	\$69,180
7	\$78,020
8	\$86,860
Each Additional Person	\$8,840
* Effective July 1, 2019 to June 30, 2020	

3. GOALS

- Increase customer enrollment in the program by 10%.

4. ACHIEVEMENTS

- As of October 2019, there are approximately 119,378 participants enrolled in the program.

5. ISSUES

- Online applications have a longer processing duration
- Application submission tracking needs to be updated

6. OUTREACH STRATEGY / PLAN

Low Income Applications can be obtained through the following customer support channels:

- Customer Contact Center who can mail the application to the customer;
- LADWP.com to access an online application;
- Customer Service Center to receive the application; and
- Local community outreach events to receive the application.

Planned Improvements:

- Increase outreach through governmental agencies
- Increase use of newer technology for faster application submission and approval.

LADWP EMDI – Procurement

RESPONSIBLE MANAGER: Karyn Son

Reporting Period: Nov 2019 – Apr 2020

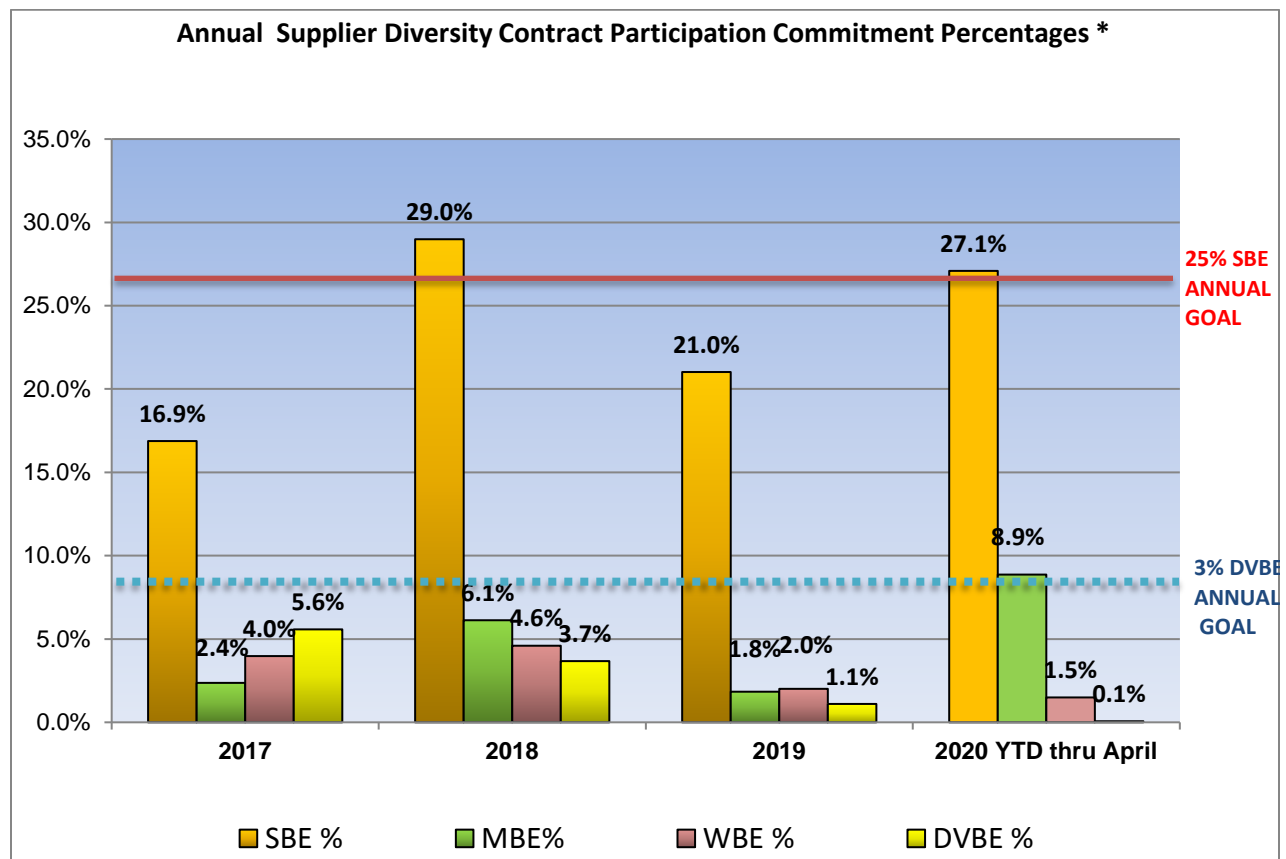
LADWP's SBE/DVBE Program

Commitment percentages based on Board-awarded contracts that had SBE/DVBE participation requirements. Firms with multiple certifications are counted in each category in which they were certified.

Supplier Diversity Contract Participation Commitments*

CALENDAR YEAR	Contracts Awarded with SBE/DVBE Requirements	SBE \$	SBE %	MBE \$	MBE%	WBE \$	WBE %	DVBE \$	DVBE %
2017	\$ 570,184,675	\$ 96,235,820	16.9%	\$ 13,496,986	2.4%	\$ 22,666,390	4.0%	\$ 31,800,468	5.6%
2018	\$ 191,155,227	\$ 55,412,322	29.0%	\$ 11,708,761	6.1%	\$ 8,785,695	4.6%	\$ 7,020,876	3.7%
2019	\$ 716,882,361	\$ 150,691,643	21.0%	\$ 13,170,151	1.8%	\$ 14,405,861	2.0%	\$ 7,908,158	1.1%
2020 YTD thru April	\$ 233,639,108	\$ 63,290,994	27.1%	\$ 20,712,441	8.9%	\$ 3,488,766	1.5%	\$ 150,000	0.1%

*Firms certified as SBE/DVBE and MBE/WBE are counted as SBE or DVBE and also counted as either MBE or WBE



LADWP EQUITY METRIC – *Contract Participation (Joint)*

RESPONSIBLE MANAGER: Karyn Son
EQUITY CORE CATEGORY: Procurement

REPORTING PERIOD: November 2019– April 2020

1. NARRATIVE / BACKGROUND

The SBE/DVBE Participation Program was adopted to ensure that all businesses have an equal opportunity to do business with the Los Angeles Department of Water and Power. This program is in conformance with the Mayor’s Executive Directive No. 14, entitled the Business Inclusion Program. This metric measures the achievement of SBE/DVBE Participation Program goals, which were set with an overall Department goal of 25% SBE participation and 3% DVBE participation. This metric also measures the participation commitments of MBE/WBE/LGBTE firms in LADWP service contracts over \$150k.

2. CRITERIA

Mandatory SBE/DVBE participation requirements are set in all construction and service contracts valued over \$150,000.

- Only certified SBEs and DVBEs count toward the fulfillment of the minimum mandatory requirement.
- Failure to meet the minimum mandatory SBE/DVBE participation requirement in bids or proposals results in a finding of non-responsiveness.
- Failure to achieve the requirement can result in penalties or termination of the contract.

3. ACHIEVEMENTS

- Annual contract participation commitment percentages YTD from January 2019 through April 2020:
 - SBE 27.1%
 - MBE 8.9%
 - WBE 1.5%
 - DVBE 0.1%
- Created and conducted “How to Do Business with LADWP” workshops for Small Businesses in the LA Metro and Valley regions.
- Participated in 10 in-person outreach events and 1 virtual outreach event.
- Hosted 3 new vendor introduction meetings.

4. ISSUES

- Reporting is currently done manually as the procurement system does not currently capture the certification status of vendors nor does it capture subcontractor certification status and payment information.
- Social distancing measures due to COVID-19 restricts participation in, and hosting of, in-person networking and outreach events.

5. OUTREACH STRATEGY / PLAN

Despite social distancing restrictions, LADWP will continue with its outreach efforts to reach out to small and diverse businesses through various virtual platforms.

- Establish Ad-Hoc Supplier Diversity committee comprised of businesses, advocacy agencies and LADWP staff to collect recommendations to enhance business inclusion.
- In lieu of LADWP’s biannual Vendor Connection Event, LADWP is partnering with the City of Los Angeles Department of Public Works, the Mayor’s Office of Budget & Innovation, and Economic & Workforce Development Department to host a series of live “Accessing LA” webinars to share information and resources available to businesses interested in learning about how to do business with the City and LADWP. The virtual outreach event series will consist of 3 webinars that will be presented bi-weekly over the course of the summer of 2020.
- Creating new plan and program as an alternative to the 2020 LA Small Business Academy typically held in a classroom setting with limited number of participants. Developing a series of educational videos and virtual meetings covering a full range of topics related to contracting with LADWP and the City to reach a larger audience and meet social distancing requirements.

LADWP EMDI – Employment

RESPONSIBLE MANAGER: Shannon Pascual

Reporting Period: Nov 2019 – Apr 2020

New Hires/Promotions Demographic Composition

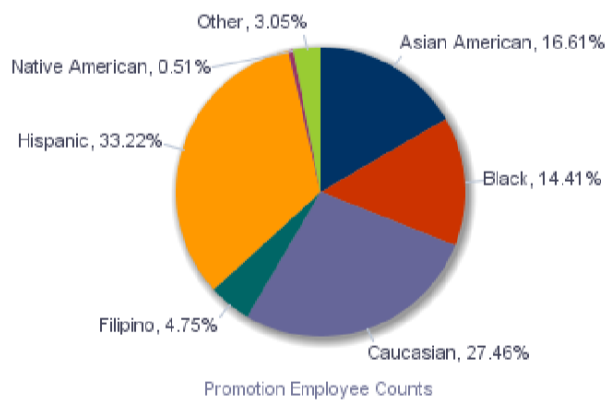
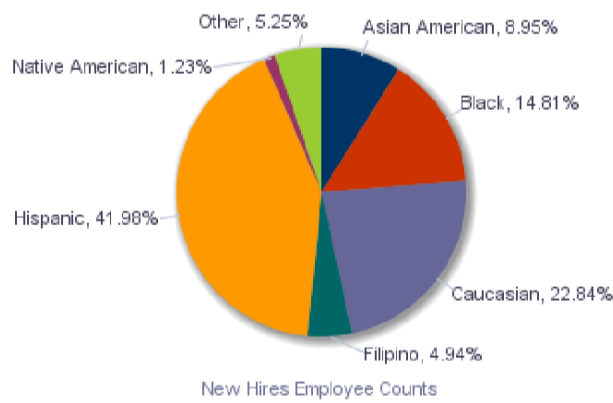
Hiring and Promotions by Ethnic Group

Ethnic Group	New Hires		Promotion	
	F	M	F	M
Asian American	13	16	36	62
Black	27	21	49	36
Caucasian	11	63	30	132
Filipino	8	8	15	13
Hispanic	27	109	43	153
Native American	3	1	2	1
Other	4	13	9	9
Grand Total	93	231	184	406

Hiring and Promotions by Gender

Gender	New Hires	Promotion
F	93	184
M	231	406
Grand Total	324	590

Hiring and Promotions by Ethnic Group



Hiring and Promotions by Gender

