




INFORMATIONAL BOARD LETTER

  
**ANN M. SANTILLI**  
Chief Financial Officer

  
**MARTIN L. ADAMS**  
General Manager and Chief Engineer

**DATE:** January 27, 2021

**SUBJECT:** LADWP Rates and Equity Metrics Semi-Annual Report

**SUMMARY**

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

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

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

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

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

**RATES METRICS**

**Rates Metrics 2020-2021 (Fiscal-Year-To-Date October 2020)**

The Rates Metrics currently include 20 for Water System, 27 for Power System, and 9 for Joint System. A summary of the fiscal-year-to-date October 2020 performance status of all these metrics is listed in the Rates Metrics Summary (Attachment I).

<b>LADWP Rates Metrics Status (Fiscal Year to Date October 2020)</b>		
<b>Performance Status</b>		<b># Metrics</b>
Exceeds Target	Blue	<b>8</b>
Within Acceptable Variance	Green	<b>29</b>
Outside Acceptable Variance	Red	<b>13</b>
Needs Attention	Yellow	<b>0</b>
Information Only	White	<b>6</b>
Total		<b>56</b>

For the period ending October 2020, 66 percent of the metrics are either within the acceptable variance or exceed the target.

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

### Power System

<b>Metric</b>	<b>Variance</b>	<b>Explanation</b>
Last Signed Power Purchase Agreement (PPA) (\$/MWh) by technology (Wind)	192.6% (\$54.3/MWh)	<ul style="list-style-type: none"> <li>2013 market efficiencies have driven the PPA price down significantly. Hence, a PPA signed in 2013 creates a significant variance.</li> <li>A wind PPA is projected to be executed in the current fiscal year which will organically resolve the variance.</li> </ul>
Power System Reliability Program (PSRP) Transmission Capital (Budget vs. Actual)	20.4% (\$5.6M)	<ul style="list-style-type: none"> <li>The Pacific DC Intertie Scheduled Inspection and Repair period, which runs from mid-October to early November, allows for work on de-energized equipment at Sylmar Converter Station and on the transmission line, producing an uptick in expenditures.</li> </ul>
PSRP Transmission O&M (Budget vs. Actual)	-33.1% (-\$3.5M)	<ul style="list-style-type: none"> <li>The contract for work related to the LA Basin Tower Painting Program is still under development and a purchase order is expected to be issued in FY 21/22.</li> </ul>
Cost per Circuit Mile for Underground Circuit	-62.5% (-\$3.5M/Mile)	<ul style="list-style-type: none"> <li>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.</li> <li>The actual cost per circuit mile is only available upon completion of the circuit replacement, "trending costs" are provided if the final actuals are not available.</li> </ul>

Metric	Variance	Explanation
PSRP Substation Capital (Budget vs. Actual)	-18.4% (-\$7.6M)	<ul style="list-style-type: none"> <li>The current COVID-19 pandemic resulted in rotational work assignments for the months of July and August. Construction and test support is limited due to minimum physical and social distancing requirements in spaces such as control rooms.</li> </ul>
PSRP Distribution Capital (Budget vs. Actual)	17.9% (\$21.1M)	<ul style="list-style-type: none"> <li>At the beginning of the fiscal year District crews were focusing resources on PSRP distribution capital projects.</li> </ul>
PSRP Distribution O&M (Budget vs. Actual)	17.6% (\$8.7M)	<ul style="list-style-type: none"> <li>The increased spending is due to the payment of backlogged invoices.</li> <li>Cost overrun will decrease as the FY progresses.</li> </ul>
Average Unit Cost per Transformer	16.5% (\$1.5K)	<ul style="list-style-type: none"> <li>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.</li> </ul>
Average Unit Cost per Pole	73.9% (\$18.3K)	<ul style="list-style-type: none"> <li>The number of crews, the amount of employees on each crews, and how time is entered into WMIS by each employee affects WMIS reporting, which consequently affects the cost per unit average.</li> <li>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.</li> </ul>
Average Unit Cost per Mile of Cable	40.1% (\$454K)	<ul style="list-style-type: none"> <li>Due to Bureau of Engineering street restrictions, much of the construction has been conducted after hours, on weekends, or around the clock adding to the labor cost per Memorandum of Understanding (MOU) guidelines.</li> </ul>

### Water System

Metric	Variance	Explanation
Number of Full Time Equivalents hired and dedicated to Water Distribution field positions as compared to plan	19.7%	<ul style="list-style-type: none"> <li>The division is continuously hiring; however, due to internal transfers, promotions, and attrition, the Division has been unable to reduce the number of field vacancies.</li> </ul>
Aqueduct refurbishment Capital (Budget vs. Actual)	-48.6% (\$-4.1M)	<ul style="list-style-type: none"> <li>Several capital projects have been postponed due to delays in planning, permitting, and PCM work being rescheduled due to COVID-19.</li> </ul>

## Joint System

Metric	Variance	Explanation
Financial and Human Resources Replacement Project (Budget vs. Actual)	-53.7% (\$-3.9M)	<ul style="list-style-type: none"> <li>Progress was temporarily delayed while the LADWP reprioritized critical projects and hire needed resources.</li> <li>Enterprise Resource Planning labor expenditures are below approved budget as hiring is ongoing to fill requested positions.</li> </ul>

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

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

## Rates Metrics Fiscal Year 2019-2020

The Rates Metrics for Fiscal Year 2019-2020 included 20 for Water System, 28 for Power System, and 9 for Joint System. A summary of the fiscal-year-to-date June 2020 performance status of all these metrics is listed in the Rates Metrics Summary (Attachment II).

<b>LADWP Rates Metrics Status (Fiscal Year to Date June 2020)</b>		
<b>Performance Status</b>		<b># Metrics</b>
Exceeds Target	Blue	<b>4</b>
Within Acceptable Variance	Green	<b>27</b>
Outside Acceptable Variance	Red	<b>17</b>
Needs Attention	Yellow	<b>0</b>
Information Only	White	<b>9</b>
Total		<b>57</b>

For the period ending June 2020, 54 percent of the metrics were either within the acceptable variance or exceed the target. Achievements highlighted in the metrics include:

## Power System

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

## Water System

- Met pLAN goal of 20 percent reduction in gallons per capita per day and is sustaining this milestone.
- Exceeded asset replacement goals for trunk line.

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

## Power System

Metric	Variance	Explanation
Average Cost per Electric Distribution Mechanic Trainee (EDMT)	22.3% (\$116.4K/Trainee)	<ul style="list-style-type: none"> <li>• The variance for cost per trainee is due to increased expenditures in classroom trainers and classroom training for EDTMs. Additionally, the cost will vary depending on the tools and materials purchased for subsequent new classes.</li> </ul>
PSRP Generation Capital (Budget vs. Actual)	-76.2% (\$-32.8M)	<ul style="list-style-type: none"> <li>• 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.</li> </ul>
PSRP Transmission Capital (Budget vs. Actual)	43.5% (\$32.7M)	<ul style="list-style-type: none"> <li>• Remaining oil-filled 138kV circuits are being replaced with 230kV cable, causing an unforeseen increase in expenditures. As a result, \$30M of contract invoices were processed in January 2020.</li> </ul>
PSRP Transmission O&M (Budget vs. Actual)	20.7% (\$7.2M)	<ul style="list-style-type: none"> <li>• The jobs in PSRP Transmission O&amp;M were under budgeted due to vegetation clearance and clean-up of homeless encampments. The budget for the jobs has been adjusted for next fiscal year.</li> </ul>
Cost per Circuit Mile for Underground Circuit	109.1% (\$11.5M/Mile)	<ul style="list-style-type: none"> <li>• A substantial amount of contract invoices were processed in January 2020 which increased the year-to-date trending cost significantly</li> <li>• Actual cost per circuit mile varies significantly each year depending on the circuits to be replaced and the need to use the contingency provisions of the contract.</li> </ul>

Metric	Variance	Explanation
Average Unit Cost per Pole	47.1% (\$11.3K/Pole)	<ul style="list-style-type: none"> <li>The jobs in PSRP Transmission O&amp;M were under budgeted due to vegetation clearance and clean-up of homeless encampments. The budget for the jobs has been adjusted for next fiscal year.</li> <li>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.</li> <li>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.</li> <li>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.</li> </ul>
Average Unit Cost per Mile of Cable	17.8% (\$195.7K/Mile)	<ul style="list-style-type: none"> <li>Bureau of Engineering street restrictions require construction to be conducted after hours, on weekend, or round the clock adding to the labor cost.</li> </ul>

## 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"> <li>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, LADWP was in a temporary hiring freeze beginning mid-March and hiring resumed in May 2020.</li> </ul>
Water Supply Costs Capital (Budget vs. Actual)	-59.3% (\$-63.6M)	<ul style="list-style-type: none"> <li>Several water recycling projects were canceled or deferred due to changes in scope of work and lack of design resources.</li> <li>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 due to reductions in staff on rotation assignments.</li> <li>The demand for residential and commercial Water Conservation rebates has decreased.</li> </ul>

Metric	Variance	Explanation
Recycled Water Delivered	-19.3% (-2.3K)	<ul style="list-style-type: none"> <li>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.</li> <li>COVID-19 closures and limited access to recycled water facilities affected recycled water usage in March, April, and May.</li> </ul>
Aqueduct Refurbishment Capital (Budget vs. Actual)	-58.8% (\$-20M)	<ul style="list-style-type: none"> <li>The Grant Lake Spillway project and the second Los Angeles Aqueduct and State Water Project Intertie budget were deferred.</li> <li>COVID-19 has severely hampered efforts to complete capital projects where crews work closely together.</li> </ul>
Aqueduct Refurbishment O&M (Budget vs. Actual)	26% (\$12.1M)	<ul style="list-style-type: none"> <li>Due to COVID-19, a large amount of work was shifted from Capital to O&amp;M. Employees performed additional O&amp;M work which allows for distancing instead of the originally planned capital work.</li> </ul>
Fixed Assets Replacement (Budget vs. Actual)	-16.1% (-\$52.2M)	<ul style="list-style-type: none"> <li>Permit cancellations caused delays in construction services on various Mainline Replacement Program projects.</li> <li>Street Damage Restoration Fees (SDRF) were less than originally anticipated.</li> </ul>
Pump Stations Capital (Budget vs. Actual)	-51.2% (\$-8.6M)	<ul style="list-style-type: none"> <li>The Redmont Pump Station schedule has been delayed due to redesigning of the motors.</li> <li>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.</li> </ul>
Mainline Replacement (Feet of mainline replaced against plan)	-39.5% (-91,550 Feet)	<ul style="list-style-type: none"> <li>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.</li> </ul>
Meter Replacement	-19.5% (-6,536 meters)	<ul style="list-style-type: none"> <li>Due to the COVID-19 pandemic, field work was reduced to enable physical distancing and help stop the spread of COVID-19.</li> <li>Challenges filling vacant positions also resulted in a reduction of meter replacements.</li> </ul>

## Joint System

Metric	Variance	Explanation
Financial and Human Resources Replacement Project (Budget vs. Actual)	-73.5% (\$-21M)	<ul style="list-style-type: none"><li>• Progress was temporarily delayed while LADWP reprioritized critical projects and continues to hire needed resources.</li><li>• Enterprise Resource Planning labor expenditures are below approved budgets as hiring of additional project positions is frozen.</li></ul>

## 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

In August 2016, the LADWP Board approved Resolution No. 017 036 adopting the LADWP's Equity Metrics. The Equity Metrics advances the LADWP's efforts to optimally serve all of our customers with fairness and equity.

In October 2020, the LADWP Board approved an additional resolution to work with internal and external stakeholders to review and expand the current metrics with specific strategies as they relate to baseline, short-term, mid-term, and long-term performance goals. Furthermore, the resolution requires the LADWP to utilize data analytics and policy review to ensure that Equity Metrics goals are clear and that program implementation results in improved outcomes for Equity Metrics stakeholders.



## Equity Metrics Outreach

LADWP Board Vice President Susana Reyes spearheaded the efforts in organizing two virtual stakeholder meetings that were held in January 2021 to gain critical stakeholder input to enhance the Equity Metrics efforts. At the meetings, the LADWP introduced a new and exciting web-based mapping tool developed by the LADWP Corporate Performance Office. This new interactive data analytics tool allows stakeholders to visually see, interact with the data, and analyze the progress and impact of the Equity Metrics in their specific community via a website link. The community stakeholders actively participated in the meetings and provided valuable insights and feedback on the current and future Equity Metrics, including ways to enhance its communications of the initiative with their communities. LADWP is proposing to establish an ongoing working group with the community stakeholders for the Equity Metrics Data Initiatives. The LADWP Corporate Performance Office is developing a framework to adopt many of the suggestions provided by the stakeholders within the next 90 days.

In addition to the LADWP Board, LADWP program managers, and executives from the Office of the Mayor, the following external stakeholders were invited to the virtual stakeholder meetings.

January 2021 - Virtual Stakeholder Meeting Attendees	
• Asian Americans Advancing Justice Los Angeles	• Little Tokyo Service Center
• Asian Pacific Policy and Planning Council (A3PCon)	• Los Angeles Brotherhood Crusade
• CA Environmental Justice Alliance	• MARAVILLA Foundation
• CA Housing Partnership	• Mobility Development Group
• California Workforce Development Board	• Natural Resources Defense Council
• Climate Resolve	• Neighborhood Council Sustainability Alliance
• Coalition for Clean Air	• Pacific Asian Consortium in Employment
• Community Coalition	• Pacoima Beautiful
• Community for a Better Environment	• Pilipino Workers Center
• East L.A. Community Corporation	• Salvadorean American Leadership & Educational Fund (SALEF)
• Food and Water Action	• Sierra Club
• Greenlining Institute	• Strategic Actions for a Just Economy
• KIWA	• T.R.U.S.T. South L.A.
• L.A. Waterkeeper	• The Greenling Institute
• LAANE and RePower L.A.	• U.S. Green Building Council
• Liberty Hill	• WeTap

## Goals, Progress, and Explanations

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:

EMDI Category	May 2020 – October 2020	
Water & Power Infrastructure	Goals	Progress & Explanation
Water Quality Complaints	Respond to inquiries by end of next business day 95% of the time or better	<ul style="list-style-type: none"> <li>Continues to meet this goal</li> <li>Transactional survey data rates service as “excellent”</li> </ul>
Water System Probability of Failure & Planned Replacement	174,000 feet of mainline pipe replacement for FY 20/21 Maintain leak rate to 15 leaks per 100 miles of pipe that is well below the national industry average of 25 leaks per 100 miles of pipe	<ul style="list-style-type: none"> <li>Maintain low leak rate per 100 miles of pipe</li> <li>As of October 2020, mainline replacement was approximately 31% of the 174,000 feet goal for FY 20/21.</li> <li>Rotational work assignments due to Covid19 and reduction of work hours has affected the mainline replacement effort</li> </ul>
System Average Interruption Duration Index (SAIDI) & System Average Interruption Frequency Index (SAIFI)	SAIFI Target is 0.78 SAIDI Target is 95 minutes	<ul style="list-style-type: none"> <li>Quantitative analysis of outage statistics to identify prioritization of equipment replacement and maintenance activities</li> <li>The reliability indices for September 2020 are SAIFI at 0.70 and SAIDI at 145.81 minutes</li> <li>SAIDI is slightly higher than normal due to adverse weather in December of 2019, heat waves that lasted multiple days in August and September of 2020</li> </ul>
Power System Reliability Program – Pole, Transformer, Cable Replacements	FY 20/21 – 3,500 Poles, 850 Transformers, and 50 miles of Cable replacement	<ul style="list-style-type: none"> <li>1355 poles replaced - exceeded pole replacement target of 1168</li> <li>661 transformers replaced - exceeded planned 283 replacement target</li> <li>17 circuit miles completed - exceeded the target of 16.8 circuit mile</li> </ul>

Customer Incentive Programs and Services	Goals	Progress & Explanation
Rain Barrel/Cistern/ Water Tank Rebates	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	<ul style="list-style-type: none"> <li>• Rebated 87 rain barrels</li> <li>• Rebated 8 cisterns</li> <li>• Video on proper rain barrel installation on the Department's YouTube Sustainable Landscaping playlist</li> </ul>
Turf Removal Rebates	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	<ul style="list-style-type: none"> <li>• 264,933 sq ft of turf replaced - residential customers</li> <li>• 10,596 sq ft of turf replaced - commercial customers</li> <li>• LADWP expanded virtual workshops for customers in partnerships with MWD on California Friendly Landscape Training (CFLT), Turf Removal, and Garden Design</li> </ul>
City Plants	<p>Goal of 42,000 trees from 2019-2021</p> <p>12,000 trees distributed through Apr 2020</p>	<ul style="list-style-type: none"> <li>• Over 19,000 trees have been distributed/planted under the MOU through October</li> <li>• Tree adoptions have been modified to curbside pick-up events during the pandemic and have now gained momentum</li> <li>• Mayor's office coordinated street tree campaign over the spring and summer resulted in &gt;2,000 tree requests</li> </ul>
Commercial Direct Install Program	<p>Program Suspended since March 2020</p> <p>Goal of 800 installations per month</p>	<ul style="list-style-type: none"> <li>• Short Term - ramp up period at least 30-60 days (no start date set)</li> <li>• Mid Term - meet 50% pre-Covid participation (~400 installations per month)</li> <li>• Long Term - if able to meet first two, can easily attain 800 installations per month</li> </ul>
Home Energy Improvement Program (HEIP)	<p>Program Suspended since March 2020</p> <p>Goal of 200 installations per month</p>	<ul style="list-style-type: none"> <li>• Short Term - ramp up period at least 30-60 days (no start date set)</li> <li>• Mid Term - increase of 25% pre-Covid participation of multi-family dwelling, increase Power resources (PCM, UPCTs), Saturday appointments</li> <li>• Long Term - develop online HEIP application (IT), attain &amp; exceed pre-Covid levels of 200 homes per month, use Program Outreach &amp; Community Partnership Program (On Hold for now)</li> </ul>

Customer Incentive Programs and Services	Goals	Progress & Explanation
Refrigerator Exchange Program	<p>Program Suspended since March 2020</p> <p>Goal of 8,165 units to be exchanged annually</p>	<ul style="list-style-type: none"> <li>• Short Term - restart program, direct mail postcard campaign (currently halted), 148,000 customers identified (111,000 were sent program information)</li> <li>• Mid Term - total 2,058 refrigerators exchanged in 69 Multi Unit Dwellings, 347 units pre-qualified when program restarts</li> <li>• Long Term - customers are being pre-qualified for refrigerator exchange</li> </ul>
Consumer Rebate Program	Average goal of 11,000 rebates every six months	<ul style="list-style-type: none"> <li>• Short Term - exceeded goals, 13,402 rebates</li> <li>• Mid Term - increase staff (4 USS-C) to meet the increased demand</li> <li>• Long Term - increase awareness in disadvantaged communities, projected participation goal of 25,000 every six months</li> </ul>
Electric Vehicle Infrastructure	10,000 commercial chargers by 2022	<ul style="list-style-type: none"> <li>• 1439 chargers install from Jul to Oct of 2020, exceeding the goal of 1200 for this period</li> <li>• 1609 rebates issued - 204 for used EV, 267 for Residential Chargers, and 1138 Commercial Chargers</li> </ul>
Low Income & Lifeline Programs	Increase customer enrollment in Low Income Program by 10%	<ul style="list-style-type: none"> <li>• 117,648 participants enrolled in Low Income Program as of October 2020</li> <li>• 94,742 participants enrolled in Lifeline Program as of October 2020</li> <li>• Online and Fax applications have been partially automated</li> <li>• As of October 2020, applications have been processed within 2 business days of receipt</li> </ul>
Procurement	Goals	Progress & Explanation
Procurement		<ul style="list-style-type: none"> <li>• Annual contract participation commitment percentages: SBE 43.6%, MBE 3.9%, WBE 0.7%, DVBE 0.1%</li> <li>• LADWP partnered with other city agencies to host virtual outreach event series that consisted of 3 webinars</li> <li>• LADWP participated in 11 virtual outreach events</li> </ul>
Personnel	Goals	Progress & Explanation
Personnel		

## 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.
- Completed study 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. Additionally, the study investigated how questions asked on the Center for the Study of Los Angeles' annual LA Public Opinion Survey related to objective data measured by LADWP.
- Completed study with PA Consulting to improve the performance of and access to LADWP support programs for low-income customers. The study included discount programs, energy efficiency and conservation programs, and EV/Solar programs. A portion of the study compared LADWP support programs to similar programs administered by peer utilities in order to identify best practices and innovative methods of increasing participation.

## 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 III.

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 2020-2021 Fiscal Year to Date October 2020 (Attachment I)
- LADWP Rates Metrics Summary 2019-2020 Fiscal Year to Date June 2020 (Attachment II)
- LADWP Equity Metrics Data Initiative (Attachment III)

**ATTACHMENT I**  
**LADWP Rates Metrics Summary**  
**2020-2021 Fiscal Year To Date**  
**(October 2020)**





## LADWP RATES METRICS SUMMARY

Related Rate Adjustment Factor	Category	#	Board Metric	Definition	FY 19/20 Target	Acceptable Variance	Responsible Manager	October 2020 Performance
Reliability Cost Adjustment Factor	Power System Training Plan	1	Average cost of Power System Training Plan per trainee	Average cost of training for Electric Distribution Mechanic Technician (EDMT) classification per trainee that graduates from respective training program	EDMT: \$686.1K	+/- 15%	Mark Barbula	1.6%
	Power System Training Plan	2	Average cost of Power System Training Plan per trainee	Average cost of training for Electrical Mechanic Technician (EMT) classification per trainee that graduates from respective training program	EMT: \$511.7K	+/- 15%	Mark Barbula	-9.9%
	Power System Training Plan	3	Number of trainee graduates against Power System Training Plan	Number of Electric Distribution Mechanic Technician (EDMT) trainees that graduate from each respective training program against the annual training plan	EDMT: 22	+/- 15%	Mark Barbula	14.3%
	Power System Training Plan	4	Number of trainee graduates against Power System Training Plan	Number of Electrical Mechanic Technician (EMT) trainees that graduate from each respective training program against the annual training plan	EMT: 63	+/- 15%	Mark Barbula	0.0%
Energy Cost Adjustment Factor	Renewable Portfolio Standard (Owned)	5	Renewable Portfolio Standard (RPS) Percentage (%)	GWh from RPS plants/GWh for all customers (State requirement)	33% for Calendar Year 2020 35.75% for Calendar Year 2021	+/- 3% of each calendar year's goal toward state law mandates	Steven Pruett	6.5%
	Renewable Portfolio Standard (Owned)	6	Total RPS cost (\$/MWh) vs. plan, by technology (Wind)	Total RPS purchased power cost (\$/MWh) as compared to plan, by technology (Wind)	Wind: \$110.08/MWh	+/- 15%	Steven Pruett	-1.0%
	Renewable Portfolio Standard (Owned)	7	Total RPS cost (\$/MWh) vs. plan, by technology (Solar)	Total RPS purchased power cost (\$/MWh) as compared to plan, by technology (Solar)	Solar: \$71.93/MWh	+/- 15%	Steven Pruett	0.7%
	Renewable Portfolio Standard (Owned)	8	Total RPS cost (\$/MWh) vs. plan, by technology (Geothermal)	Total RPS purchased power cost (\$/MWh) as compared to plan, by technology (Geothermal)	Geothermal: \$80.28/MWh	+/- 15%	Steven Pruett	2.9%
	Renewable Portfolio Standard (Owned)	9	Last signed power purchase agreement (PPA) (\$/MWh) by technology (Wind)	Last signed PPA (\$/MWh) by technology (Wind)	Wind: \$28.2/MWh	+30%	Steven Pruett	192.6%
	Renewable Portfolio Standard (Owned)	10	Last signed power purchase agreement (PPA) (\$/MWh) by technology (Solar)	Last signed PPA (\$/MWh) by technology (Solar)	Solar: \$28.2/MWh	+15%	Steven Pruett	-30.2%
	Renewable Portfolio Standard (Owned)	11	Last signed power purchase agreement (PPA) (\$/MWh) by technology (Geothermal)	Last signed PPA (\$/MWh) by technology (Geothermal)	Geothermal: \$81/MWh	+15%	Steven Pruett	-6.8%

■ 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	October 2020 Performance
Reliability Cost Adjustment Factor	Power System Reliability Program (Generation)	12	Budget vs. actual (\$M) for capital in the Generation budget	Board Approved Annual Budget vs. Actual expenditures	FY20/21 Board Approved Budget - May 2020	+/- 15%	Robert Fick	1.4%
	Power System Reliability Program (Transmission)	13	Budget vs. actual (\$M) for capital included in the Transmission budget	Board Approved Annual Budget vs. Actual expenditures	FY20/21 Board Approved Budget - May 2020	+/- 15%	John Hormozi	20.4%
		14	Budget vs. actual (\$M) for O&M expenses included in the Transmission budget	Board Approved Annual Budget vs. Actual expenditures	FY20/21 Board Approved Budget - May 2020	+/- 15%	Ruben Hauser	-33.1%
	Power System Reliability Program (Transmission)	15	Cost per mile of underground circuits	Cost per mile of underground circuits	\$5.6 million	+/- 15%	Kishan Kasondra	-62.5%
	Power System Reliability Program (Substation)	16	Budget vs. actual (\$M) for capital in the Substation budget	Board Approved Annual Budget vs. Actual expenditures	FY20/21 Board Approved Budget - May 2020	+/- 15%	Sharat Batra	-18.4%
		17	Budget vs. actual (\$M) for O&M expenses in the Substation budget	Board Approved Annual Budget vs. Actual expenditures	FY20/21 Board Approved Budget - May 2020	+/- 15%	Jonathan Fonti	3.0%
	Power System Reliability Program (Distribution)	18	Budget vs. actual (\$M) for capital in the Distribution budget	Board Approved Annual Budget vs. Actual expenditures	FY20/21 Board Approved Budget - May 2020	+/- 15%	Sager Farraj	17.9%
		19	Budget vs. actual (\$M) for O&M expenses in the Distribution budget	Board Approved Annual Budget vs. Actual expenditures	FY20/21 Board Approved Budget - May 2020	+/- 15%	Arthur Johnson	17.6%
	Power System Reliability Program (Distribution)	20	Number of fixed assets replaced against plan for critical Distribution assets (Transformers)	Numbers of transformers replaced against plan	Transformer: 850	+/- 15%	Arthur Johnson	133.6%
		21	Number of fixed assets replaced against plan for critical Distribution assets (Poles)	Numbers of poles replaced against plan	Pole: 3,500	+/- 15%	Arthur Johnson	16.0%
		22	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	48.7%
		23	Number of fixed assets replaced against plan for critical Distribution assets (Cable)	Numbers of miles of cable replaced against plan	Cable: 50 miles	+/- 15%	Sager Farraj	1.2%

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	October 2020 Performance
	Power System Reliability Program (Distribution)	24	Average unit price for critical Distribution assets (Transformers)	Average unit price per transformer	Transformer: \$9.27k	+/- 15%	Walter Rodriguez	16.5%
		25	Average unit price for critical Distribution assets (Poles)	Average unit price per pole	Pole: \$24.72k	+/- 15%	Walter Rodriguez	73.9%
		26	Average unit price for critical Distribution assets (Cross-arms)	Average unit price per cross-arm	Cross-arm: \$2.06k	+/- 15%	Walter Rodriguez	-41.7%
		27	Average unit price for critical Distribution assets (Cable)	Average unit price per mile of cable	Cable: \$1,133k	+/- 15%	Walter Rodriguez	40.1%
Water (None)	Water System Staffing Program	28	Number of full time equivalents (FTEs) for Water Distribution dedicated to infrastructure field positions as compared to plan	Number of FTEs hired and dedicated to Water Distribution field position as compared to plan	Vacant budgeted Water Distribution infrastructure field positions at 34 vacancies or less by the end of the fiscal year	+/- 15%	Breonia Lindsey/Sandy Foster	19.7%
Water Supply Cost Adjustment Factor	Water Supply	29	Water supply costs budget vs. actual (\$M) for capital	Board Approved Annual Budget vs. Actual expenditures	FY20/21 Board Approved Budget - May 2020	+/- 10%	April Thang	-1.5%
	Water Supply	30	Water supply costs budget vs. actual (\$M) for O&M (excluding Purchased Water costs)	Board Approved Annual Budget vs. Actual expenditures	FY20/21 Board Approved Budget - May 2020	+/- 10%	April Thang	-5.5%
	Water Supply	31	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	32	Annual quantity of recycled water delivered against plan (AF)	AF of recycled water delivered against plan	13,000 AF	+/- 10%	Gregory Reed	1.0%
	Water Supply	33	Stormwater system capacity milestones (AF) against plan	AF of stormwater system capacity as of a milestone date against plan	78,000 AF	+/- 10%	David Pettijohn	-0.6%
	Water Supply	34	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	35	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	36	Budget vs. actual (\$M) for Aqueduct refurbishment capital	Board Approved Annual Budget vs. Actual expenditures	FY20/21 Board Approved Budget - May 2020	+/- 10%	Darin Willey	-48.6%
	Capital Improvement Program	37	Budget vs. actual (\$M) for Aqueduct refurbishment O&M	Board Approved Annual Budget vs. Actual expenditures	FY20/21 Board Approved Budget - May 2020	+/- 10%	Darin Willey	-1.4%
	Water Supply	38	Level of water conservation against target (GPCD)	Gallons per capita per day (GPCD) of water conserved against target	106 Gallons	+/- 10%	Terrence McCarthy	0.0%

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	October 2020 Performance
Water Infrastructure Adjustment Factor	Capital Improvement Program	39	Budget vs. actual (\$M) for fixed assets replacement	Board Approved Annual Budget vs. Actual expenditures	FY20/21 Board Approved Budget - May 2020	+/- 10%	April Thang	4.9%
	Capital Improvement Program	40	Budget vs. actual (\$M) for Pump Stations	Board Approved Annual Budget vs. Actual expenditures	FY20/21 Board Approved Budget - May 2020	+/- 10%	Gregory Reed	8.5%
	Capital Improvement Program	41	Budget vs. actual (\$M) for Regulator/Relief Station Retrofits	Board Approved Annual Budget vs. Actual expenditures	FY20/21 Board Approved Budget - May 2020	+/- 10%	Gregory Reed	-42.4%
	Capital Improvement Program	42	Assets replaced against plan	Feet of mainline replaced against plan	Mainline: 174,000 Feet	+/- 10%	Mainline & Meters: Breonia Lindsey/Sandy Foster	2.6%
	Capital Improvement Program	43	Assets replaced against plan	Feet of trunkline replaced against plan	Trunkline: 11,400 Feet	+/- 10%	Trunkline: Gregory Reed	34.9%
	Capital Improvement Program	44	Assets replaced against plan	Number of meters replaced against plan	Meters: 31,500	+/- 10%	Mainline & Meters: Breonia Lindsey/Sandy Foster	7.0%
Water Quality Improvement Adjustment Factor	Water Quality Projects	45	Total Water Quality Budget vs. actual (\$M) for capital	Board Approved Annual Budget vs. Actual expenditures	FY20/21 Board Approved Budget - May 2020	+/- 10%	Gregory Reed	6.0%
Water Quality Improvement Adjustment Factor	Water Quality Projects	46	Total Water Quality Budget vs. actual (\$M) for O&M	Board Approved Annual Budget vs. Actual expenditures	FY20/21 Board Approved Budget - May 2020	+/- 10%	Evelyn Cortez-Davis	-0.2%
Owens Valley Regulatory Adjustment Factor	Owens Valley	47	Budget vs. actual for Owens Lake O&M (\$M)	Board Approved Annual Budget vs. Actual expenditures	No Target	Info only	Nelson Mejia	NA
	Human Resources	48	Human Resources Total FTEs against plan	Total number of full time equivalent positions occupied vs. annual Authorized Personnel Resolution	FY20/21 Board Approved Annual Authorized Personnel Resolution - May 2020	+/- 15%	Shannon Pascual	-11.6%
	Financial and Human Resources Replacement Project	49	Financial and Human Resources Replacement Project total spending against plan	Board Approved Annual Budget vs. Actual expenditures	FY20/21 Board Approved Budget - May 2020	+/- 20%	Flora Chang	-53.7%

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	October 2020 Performance
Joint (None)	Financial and Human Resources Replacement Project	50	Financial and Human Resources Replacement Project progress against schedule	Project milestones met against project schedule	* Response Evaluation & Demos 7/20 * Enterprise Resource Plan (ERP) Software Vendor Selected 8/20 * Vendor Information Day 9/20 * ERP System Integrator (SI) Request for Proposals (RFP) Released 10/20 * ERP SI Bidders' Conference 10/20 * ERP SI RFP Response Due 12/20 * Response Evaluation & Demos 1-2/21 * Best Value ERP SI Vendor Selected 2/21 * ERP SI Blueprint/Prototyping 5/21 * Contract Negotiations Completed 9/21	Info only	Flora Chang	NA
	LADWP Employee Cost	51	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	FY20/21 Board Approved Budget - May 2020	+/- 15%	LADWP Senior Management	-7.9%
	LADWP Employees per Customer Meter	52	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)	53	Green House Gas (GHG) emissions reduction ratio	GHG emission for current year/GHG emission in 1990 (in millions of metric tons)	Calendar Year 2020: 52% below LADWP's 1990 levels Calendar Year 2021: 54% below LADWP's 1990 levels	+/- 5%	Mark Sedlacek	44.0%
Energy Cost Adjustment Factor	Energy Efficiency	54	Energy Efficiency (EE) ratio (%)	GWh installed compared to the 2010 baseline/GWh for all customers	1.60%	+/- 15%	David Jacot	-12.5%
	Energy Efficiency	55	Budget vs. actual (\$M) for the overall EE portfolio	Board Approved Annual Budget vs. Actual expenditures	FY20/21 Board Approved Budget - May 2020	+/- 15%	David Jacot	-13.2%
	Energy Efficiency	56	Levelized EE program costs (\$/kWh)	Cost per kWh over lifetime of installed energy efficiency solutions	Annual metric: Levelized Cost \$0.06/kWh	+/- 15%	David Jacot	

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



# **Power System**





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



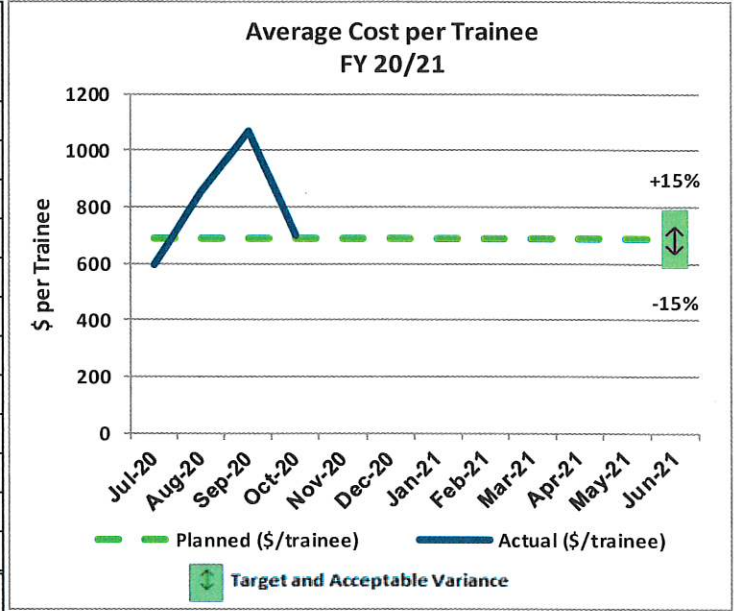
**RESPONSIBLE MANAGER:** Mark Barbula, Power System Safety and Training (PSST)    **REPORTING PERIOD:** October 2020

**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 20/21):** Target = \$686.1 per EDMT; Acceptable Variance = ± 15%

**STATUS:** Within Acceptable Variance

FYTD as of:	Planned (\$/trainee)	Actual (\$/trainee)	Variance		Re-Estimate
			\$	%	
Jul-20	686.1	594.5	(91.6)	-13.4%	
Aug-20	686.1	852.6	166.5	24.3%	
Sep-20	686.1	1,065.7	379.6	55.3%	
Oct-20	686.1	697.2	11.1	1.6%	
Nov-20	686.1				637.9
Dec-20	686.1				637.9
Jan-21	686.1				637.9
Feb-21	686.1				637.9
Mar-21	686.1				637.9
Apr-21	686.1				637.9
May-21	686.1				637.9
Jun-21	686.1				637.9
<b>Acceptable Variance</b>			± 15%		-7.0%



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

**1. BACKGROUND / PURPOSE**

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

**2. ACHIEVEMENTS / MILESTONES MET**

- The past classes average success rates are based on 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 due to decreased actuals in the Classroom Training for EDM Trainees (X7922), Classroom Trainers for EDM Trainees (X7999), and Manage and

Administer the PSST Organization (X7955) Jobs as compared to the month of September.

- Annualized Job totals for (X7922/X7999/X7955) vary depending on the tools and materials purchased for subsequent new classes.
- The Re-Estimate of \$637.9k was calculated using the final figures of the related Jobs (X7922/X7999/X7955) for the entire fiscal year 19/20 with the 12-month average trainee occupancy.

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

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

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

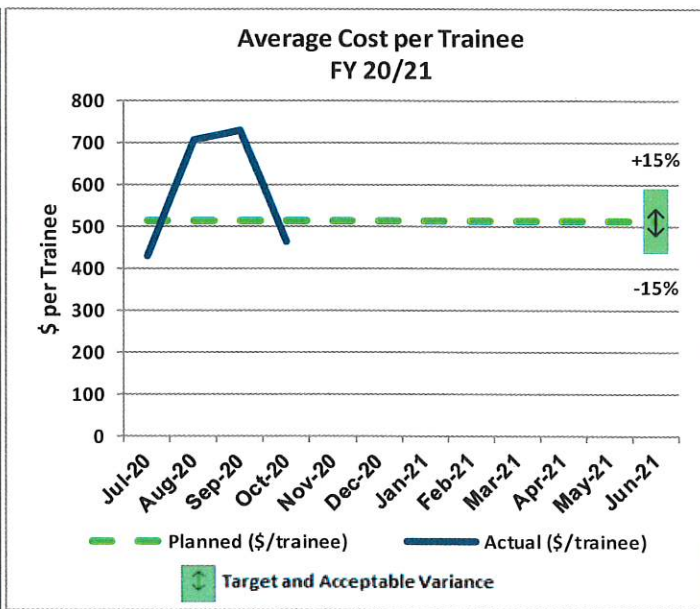
RESPONSIBLE MANAGER: Mark Barbula, Power System Safety and Training (PSST) REPORTING PERIOD: October 2020

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 20/21): Target = \$511.7K per EMT; Acceptable Variance = ± 15%

STATUS: Within Acceptable Variance

FYTD as of:	Planned (\$/trainee)	Actual (\$/trainee)	Variance		Re-Estimate
			\$	%	
Jul-20	511.7	428.3	(83.4)	-16.3%	
Aug-20	511.7	703.8	192.1	37.5%	
Sep-20	511.7	726.3	214.6	41.9%	
Oct-20	511.7	460.8	(50.9)	-9.9%	
Nov-20	511.7				478.4
Dec-20	511.7				478.4
Jan-21	511.7				478.4
Feb-21	511.7				478.4
Mar-21	511.7				478.4
Apr-21	511.7				478.4
May-21	511.7				478.4
Jun-21	511.7				478.4
<b>Acceptable Variance</b>			<b>± 15%</b>		<b>-6.5%</b>



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 due to decreased actuals in the Classroom Training for the EM Trainees (X7923), Classroom Trainers for EM Trainees (X7926), and Manage and

Administer the PSST Organization (X7955) Jobs as compared to the month of September.

- Annualized Job totals for (X7923/X7926/X7955) vary depending on the tools and materials purchased for subsequent new classes.
- The Re-Estimate of \$478.4k was calculated using the final figures of the related Jobs (X7923/X7926/X7955) for the entire fiscal year 19/20 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.

Within Acceptable Variance  Outside Acceptable Variance  Exceeds Target  Needs Attention

# LADWP RATES METRIC – EDMT Graduates (Power)



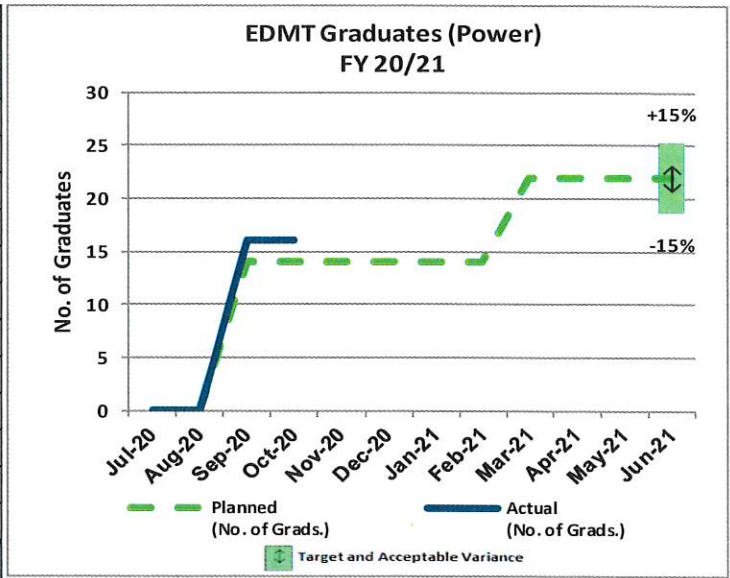
RESPONSIBLE MANAGER: Mark Barbula, Power System Safety & Training (PSST)      REPORTING PERIOD: October 2020

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

TARGET & ACCEPTABLE VARIANCE (FY 20/21): Target = 22 graduates; Acceptable Variance = ± 15%

STATUS: Within Acceptable Variance

FYTD as of:	Planned (No. of Grads.)	Actual (No. of Grads.)	Variance		Re-Estimate
			No.	%	
Jul-20	0	0	0	0.0%	
Aug-20	0	0	0	0.0%	
Sep-20	14	16	2	14.3%	
Oct-20	14	16	2	14.3%	
Nov-20	14				16
Dec-20	14				16
Jan-21	14				16
Feb-21	14				16
Mar-21	22				23
Apr-21	22				23
May-21	22				23
Jun-21	22				23
<b>Acceptable Variance</b>			<b>± 15%</b>		<b>4.5%</b>



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

### 1. BACKGROUND / PURPOSE

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

### 2. ACHIEVEMENTS / MILESTONES MET

- In the FY 19/20, a total of 16 EDMs have graduated.
- 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 and one of them is expected to graduate in March 2021 with a projected 7 graduates.

### 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: Mark Barbula, Power System Safety & Training

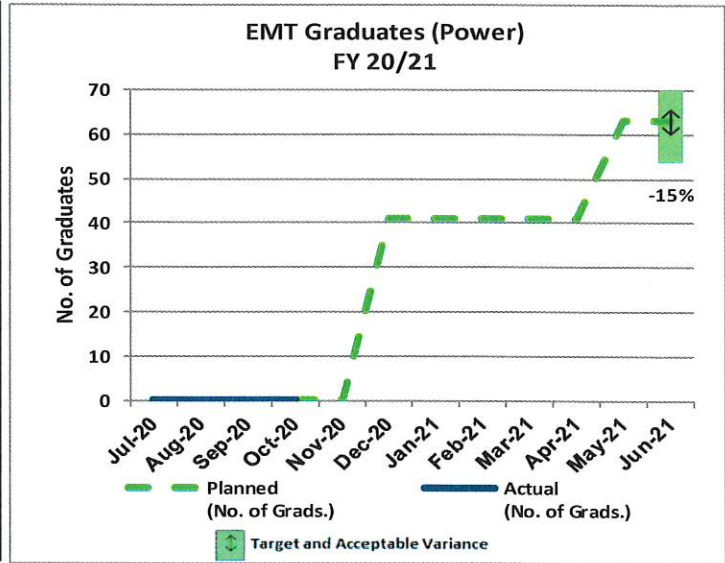
REPORTING PERIOD: October 2020

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

TARGET & ACCEPTABLE VARIANCE (FY 20/21): Target = 63 graduates; Acceptable Variance = ± 15%

**STATUS:** Within Acceptable Variance

FYTD as of:	Planned (No. of Grads.)	Actual (No. of Grads.)	Variance		Re-Estimate
			No.	%	
Jul-20	0	0	0	0.0%	
Aug-20	0	0	0	0.0%	
Sep-20	0	0	0	0.0%	
Oct-20	0	0	0	0.0%	
Nov-20	0				0
Dec-20	41				41
Jan-21	41				41
Feb-21	41				41
Mar-21	41				41
Apr-21	41				41
May-21	63				63
Jun-21	63				63
<b>Acceptable Variance</b>			<b>± 15%</b>	<b>0.0%</b>	



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 14 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)

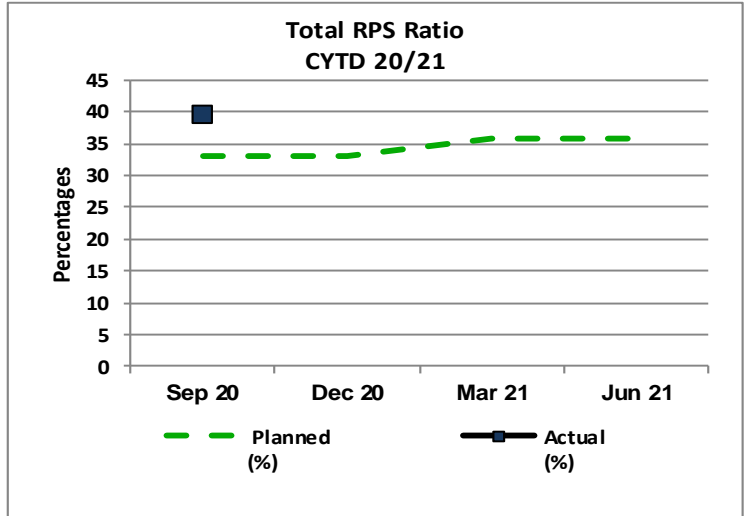
**RESPONSIBLE MANAGER:** Steven Pruett, Power External Energy Resources *SEP* **REPORTING PERIOD:** October 2020

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

**TARGET & ACCEPTABLE VARIANCE (FY 20/21):** Target = 33.00% for calendar year 2020 and 35.75% for calendar year 2021; Acceptable Variance = ± 3%

**STATUS:** Exceeds Target

CYTD as of:	Planned (%)	Actual (%)	Variance	Re-Estimate (If Applicable)
			%	
Sep 20	33.00	39.5	6.5%	
Dec 20	33.00			
Mar 21	35.75			
Jun 21	35.75			
<b>Acceptable Variance</b>			± 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.

**2. ACHIEVEMENTS / MILESTONES MET**

- No updates.

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

- Actuals for the second quarter of FY 20/21 will be available in February 2020.

**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)

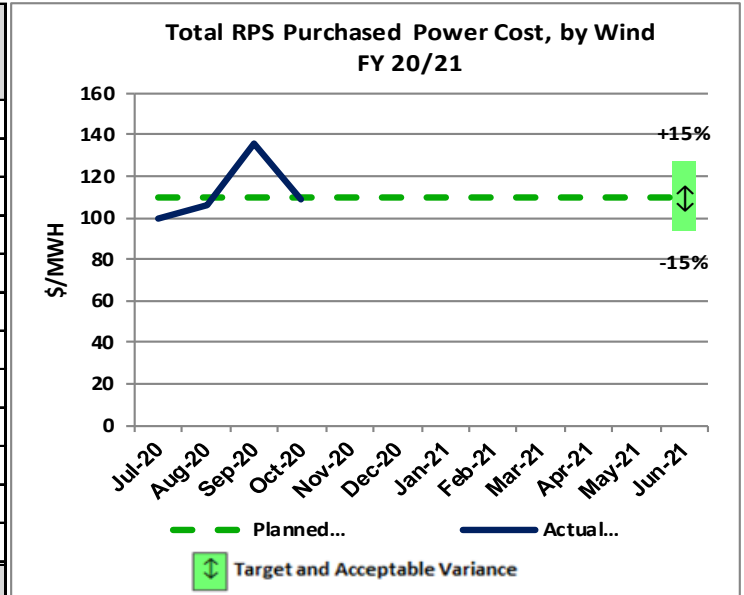
**RESPONSIBLE MANAGER:** Steven Pruet, Power External Energy Resources *SP* **REPORTING PERIOD:** October 2020

**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 20/21):** Target = \$110.08/MWH; Acceptable Variance = ± 15%

**STATUS:** Within Acceptable Variance

FYTD as of:	Planned (\$/MWH)	Actual (\$/MWH)	Variance		Re-Estimate
			\$	%	
Jul-20	110.08	99.56	-10.52	-9.6%	
Aug-20	110.08	105.67	-4.41	-4.0%	
Sep-20	110.08	135.98	25.9	23.5%	
Oct-20	110.08	109.01	-1.07	-1.0%	
Nov-20	110.08				
Dec-20	110.08				
Jan-21	110.08				
Feb-21	110.08				
Mar-21	110.08				
Apr-21	110.08				
May-21	110.08				
Jun-21	110.08				
<b>Acceptable Variance</b>			± 15%		



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

**1. BACKGROUND / PURPOSE**

- PPA = Power Purchase Agreement. The energy cost is calculated at plant’s “bus-bar”, in dollars per mega-watt-hour (\$/MWH), per executed PPA.
- The aggregated energy costs are the weighted average of seven wind PPAs for which the \$/MWH cost is determined by the seven individual PPAs, but the energy outputs are a function of the individual project’s capacity and wind resource availability, which is variable.
- Wind energy supports meeting Renewable Portfolio Standard (RPS) goals. Wind energy is currently estimated to represent 31% of the Calendar Year 2020 RPS portfolio.

**2. ACHIEVEMENTS / MILESTONES MET**

- No updates.

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

- Actual is within acceptable variance.

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

- No recommendations at this time.

*SP*

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

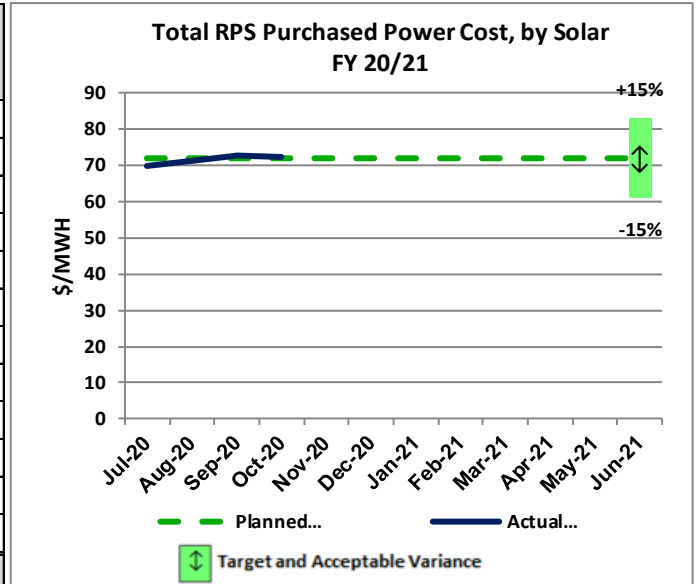
RESPONSIBLE MANAGER: Steven Pruet, Power External Energy Resources *SP* REPORTING PERIOD: October 2020

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

TARGET & ACCEPTABLE VARIANCE (FY 20/21): Target = \$71.93/MWH; Acceptable Variance = ± 15%

STATUS: Within Acceptable Variance

FYTD as of:	Planned (\$/MWH)	Actual (\$/MWH)	Variance		Re-Estimate
			\$	%	
Jul-20	71.93	69.91	-2.02	-2.8%	
Aug-20	71.93	71.04	-0.89	-1.2%	
Sep-20	71.93	72.53	0.6	0.8%	
Oct-20	71.93	72.42	0.49	0.7%	
Nov-20	71.93				
Dec-20	71.93				
Jan-21	71.93				
Feb-21	71.93				
Mar-21	71.93				
Apr-21	71.93				
May-21	71.93				
Jun-21	71.93				
<b>Acceptable Variance</b>			± 15%		



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

## 1. BACKGROUND / PURPOSE

- PPA = Power Purchase Agreement. The energy cost is calculated at plant’s “bus-bar”, in dollars per mega-watt-hour (\$/MWH), per executed PPA.
- The aggregated energy costs are the weighted average of the solar PPAs for which the \$/MWH cost is fixed by individual PPAs and weighted by actual generation.
- Solar energy supports meeting Renewable Portfolio Standard (RPS) goals. Solar energy is currently estimated to represent 41% of the Calendar Year 2020 RPS portfolio.

## 2. ACHIEVEMENTS / MILESTONES MET

- No updates.

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

- Actual is within acceptable variance.

## 4. MITIGATION PLAN AND / OR RECOMMENDATIONS

- No recommendations at this time.

*SP*

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

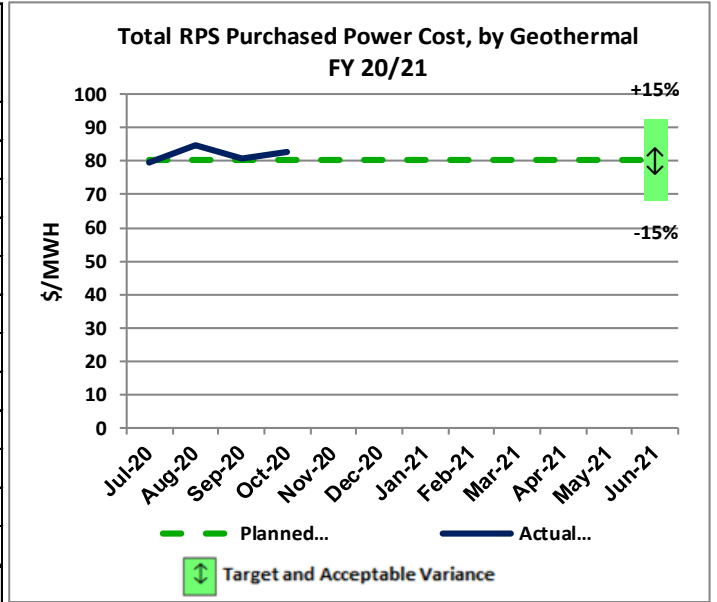
**RESPONSIBLE MANAGER:** Steven Pruett, Power External Energy Resources *SEP* **REPORTING PERIOD:** October 2020

**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 20/21):** Target = \$80.28/MWH; Acceptable Variance = ± 15%

**STATUS:** Within Acceptable Variance

FYTD as of:	Planned (\$/MWH)	Actual (\$/MWH)	Variance		Re-Estimate
			\$	%	
Jul-20	80.28	79.45	-0.83	-1.0%	
Aug-20	80.28	84.89	4.61	5.7%	
Sep-20	80.28	80.90	0.62	0.8%	
Oct-20	80.28	82.57	2.29	2.9%	
Nov-20	80.28				
Dec-20	80.28				
Jan-21	80.28				
Feb-21	80.28				
Mar-21	80.28				
Apr-21	80.28				
May-21	80.28				
Jun-21	80.28				
<b>Acceptable Variance</b>			± 15%		



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

## 1. BACKGROUND / PURPOSE

- PPA = Power Purchase Agreement. The energy cost is calculated at plant’s “bus-bar”, in dollars per mega-watt-hour (\$/MWH), per executed PPA.
- The aggregated energy costs are the weighted average of six geothermal PPAs for which the \$/MWH cost is fixed for firm and imbalance energy. However, the energy outputs are a function of the individual project’s capacity and geothermal resource availability, which is variable.
- Geothermal energy supports meeting Renewable Portfolio Standard (RPS) goals. Geothermal energy currently represents 25% of the Calendar Year 2020 RPS portfolio.

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

- Actual is within acceptable variance.

## 4. MITIGATION PLAN AND / OR RECOMMENDATIONS

- No recommendations at this time.

## 2. ACHIEVEMENTS / MILESTONES MET

- No updates.

*3*



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

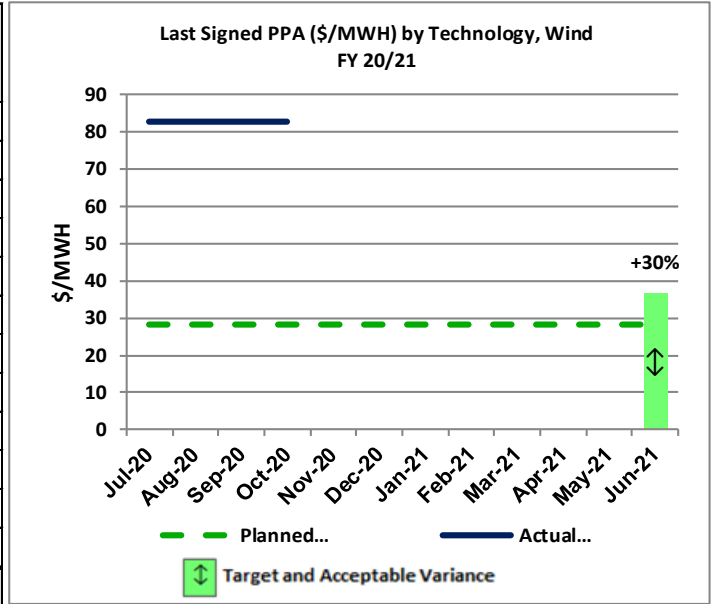
**RESPONSIBLE MANAGER:** Steven Pruett, Power External Energy Resources *SEP* **REPORTING PERIOD:** October 2020

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

**TARGET & ACCEPTABLE VARIANCE (FY 20/21):** Target = \$28.20/MWH; Acceptable Variance = + 30%

**STATUS:** Outside Acceptable Variance

FYTD as of:	Planned (\$/MWH)	Actual (\$/MWH)	Variance		Re-Estimate
			\$	%	
Jul-20	28.20	82.50	54.30	192.6%	
Aug-20	28.20	82.50	54.30	192.6%	
Sep-20	28.20	82.50	54.30	192.6%	
Oct-20	28.20	82.50	54.30	192.6%	
Nov-20	28.20				
Dec-20	28.20				
Jan-21	28.20				
Feb-21	28.20				
Mar-21	28.20				
Apr-21	28.20				
May-21	28.20				
Jun-21	28.20				
<b>Acceptable Variance</b>			+ 30%		



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

**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.

**2. ACHIEVEMENTS / MILESTONES MET**

- No updates.

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

- 2013 market efficiencies have driven the PPA price down significantly. Hence, a PPA signed in 2013 creates a significant variance. A wind PPA is projected to be executed in this fiscal year which will organically resolve the variance.
- The last signed wind PPA was executed in July 2013 for \$82.50/MWH. The target is based on CPUC’s 2020 Padilla Report which reflects current trends.

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

- No recommendations at this time.

*3*

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

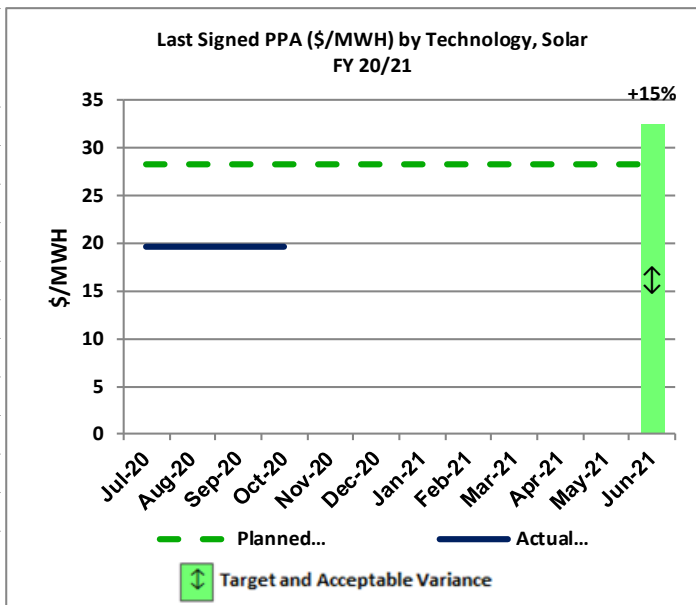
RESPONSIBLE MANAGER: Steven Pruett, Power External Energy Resources *SP* REPORTING PERIOD: October 2020

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

TARGET & ACCEPTABLE VARIANCE (FY 20/21): Target = \$28.20/MWH; Acceptable Variance = + 15%

STATUS: Exceeds Target

FYTD as of:	Planned (\$/MWH)	Actual (\$/MWH)	Variance		Re-Estimate
			\$	%	
Jul-20	28.20	19.67	-8.53	-30.2%	
Aug-20	28.20	19.67	-8.53	-30.2%	
Sep-20	28.20	19.67	-8.53	-30.2%	
Oct-20	28.20	19.67	-8.53	-30.2%	
Nov-20	28.20				
Dec-20	28.20				
Jan-21	28.20				
Feb-21	28.20				
Mar-21	28.20				
Apr-21	28.20				
May-21	28.20				
Jun-21	28.20				
Acceptable Variance			+ 15%		



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

## 1. BACKGROUND / PURPOSE

- PPA = Power Purchase Agreement. The \$39.62 energy cost is accounted for at the plant's "bus-bar", in dollars per mega-watt-hour (\$/MWH).
- Per Exhibit V of the PPA, the energy storage cost adder is \$19.95, resulting in the above reported value of \$19.67.

## 2. ACHIEVEMENTS / MILESTONES MET

- The last signed solar PPA included battery storage.

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

- The target is based on CPUC's 2020 Padilla Report which reflects current trends and does not include the cost of the energy storage adder.

## 4. MITIGATION PLAN AND / OR RECOMMENDATIONS

- No recommendations at this time.

*3*

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

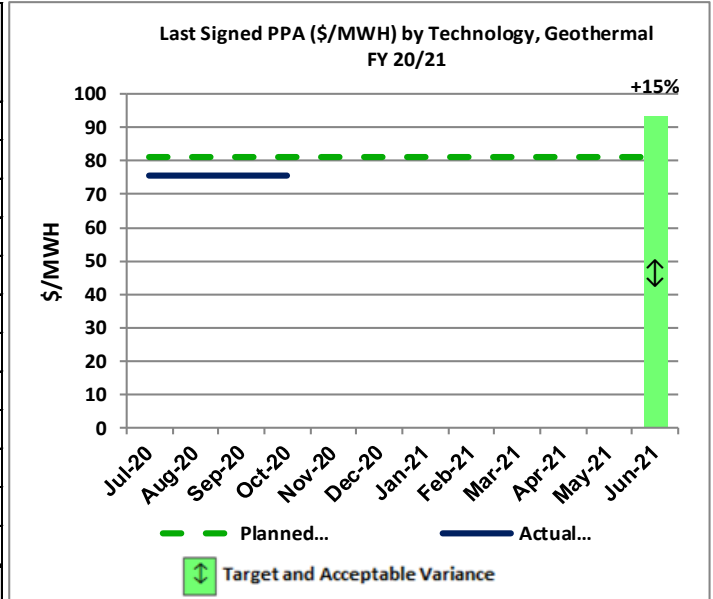
RESPONSIBLE MANAGER: Steven Pruet, Power External Energy Resources *SP* REPORTING PERIOD: October 2020

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

TARGET & ACCEPTABLE VARIANCE (FY 20/21): Target = \$81.00/MWH; Acceptable Variance = + 15%

STATUS: Within Acceptable Variance

FYTD as of:	Planned (\$/MWH)	Actual (\$/MWH)	Variance		Re-Estimate
			\$	%	
Jul-20	81.00	75.50	-5.50	-6.8%	
Aug-20	81.00	75.50	-5.50	-6.8%	
Sep-20	81.00	75.50	-5.50	-6.8%	
Oct-20	81.00	75.50	-5.50	-6.8%	
Nov-20	81.00				
Dec-20	81.00				
Jan-21	81.00				
Feb-21	81.00				
Mar-21	81.00				
Apr-21	81.00				
May-21	81.00				
Jun-21	81.00				
<b>Acceptable Variance</b>			+ 15%		



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

**1. BACKGROUND / PURPOSE**

- PPA = Power Purchase Agreement. The energy cost is calculated at plant’s “bus-bar”, in dollars per mega-watt-hour (\$/MWH), per executed PPA.

**2. ACHIEVEMENTS / MILESTONES MET**

- No updates.

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

- The last signed geothermal PPA was executed in June 2017 for \$75.50/MWH. The target is based on CPUC’s 2020 Padilla Report which reflects current trends.

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

- No recommendations at this time.

*SP*

# LADWP RATES METRIC – Power System Reliability Program

## Generation, Capital (Power)

RESPONSIBLE MANAGER: Robert Fick, Power Supply Operations

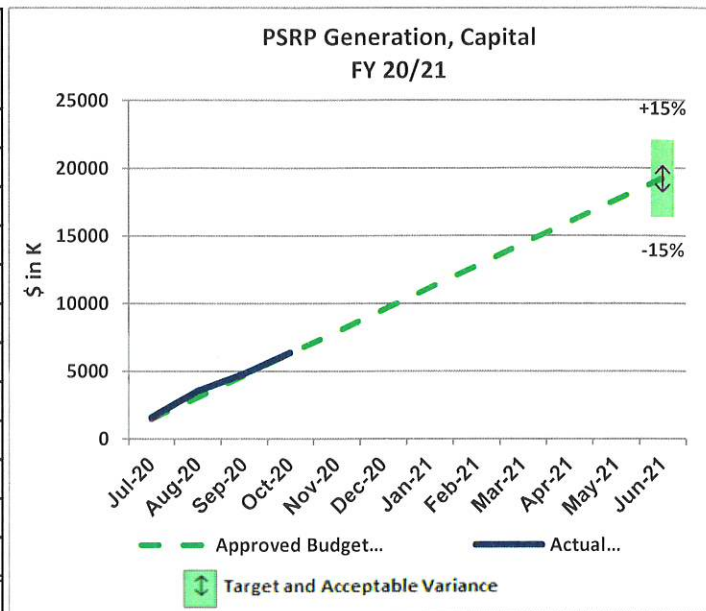
REPORTING PERIOD: October 2020

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

TARGET & ACCEPTABLE VARIANCE (FY 20/21): Target = \$19,224.5K; 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-20	1,464.0	1,581.0	117.0	8.0%	
Aug-20	3,078.6	3,564.0	485.4	15.8%	
Sep-20	4,693.2	4,830.0	136.8	2.9%	
Oct-20	6,307.8	6,399.0	91.2	1.4%	
Nov-20	7,922.4				
Dec-20	9,537.0				
Jan-21	11,151.5				
Feb-21	12,766.1				
Mar-21	14,380.7				
Apr-21	15,995.3				
May-21	17,609.9				
Jun-21	19,224.5				
Acceptable Variance			± 15%		



SOURCE OF DATA: FI 21186 (KPI # 01.03.01.08)

### 1. BACKGROUND / PURPOSE

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

### 2. ACHIEVEMENTS / MILESTONES MET

- Castaic Power Plant (CPP) – Unit 4 Overhaul Project is completed. Crews also completed 2500-hour run time generator and turbine inspections on Units 2 and 3; conducted full closure test with California Department of Water Resources (CDWR) on Angeles Tunnel Slide Gate (regulatory requirement).
- Harbor Generating Station crew performed major overhaul of Unit 1. Work includes complete dismantle of combustion turbine to inspect, repair and replace badly worn parts. Crew also performed work on generator; the rotor was removed, cleaned, tested and re-installed; brushes were replaced; the stator was cleaned and tested; the exciter and collector compartments were cleaned.

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

- The overrun is due to emergency inspection and repair at Haynes Generating Station

Total Project Approved From Inception to FY28/29	\$334.8M
Total Project Estimates	\$290.5M
Projects Approved to Date	\$163.2M
Project Actuals to Date	\$89.3M

### 4. MITIGATION PLAN AND / OR RECOMMENDATIONS

- The variance is within acceptable range. Division continues to coordinate with Mechanical Repair Services for CPP Unit Overhaul work.

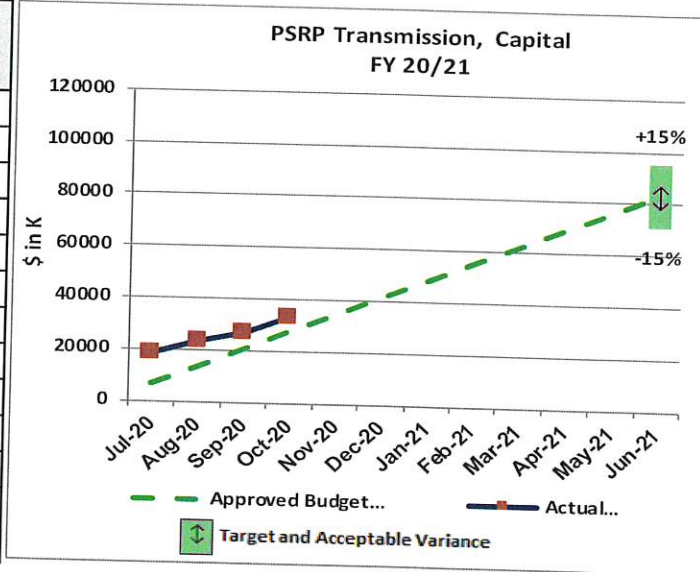
Within Acceptable Variance  Outside Acceptable Variance  Exceeds Target  Needs Attention

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

**RESPONSIBLE MANAGER:** John Hormozi, Power Transmission & Distribution Division **REPORTING PERIOD:** October 2020  
**DEFINITION OF RATES METRIC:** Board Approved Annual Budget vs. Actual Expenditures For PSRP Transmission, Capital  
**TARGET & ACCEPTABLE VARIANCE (FY 20/21):** Target = \$83,034.3K; Acceptable Variance = ± 15%

**STATUS:** Outside Acceptable Variance

FYTD as of:	Approved Budget (\$ in K)	Actual (\$ in K)	Variance		Re-Estimate
			\$ in K	%	
Jul-20	6,919.5	18,452.0	11,532.5	166.7%	
Aug-20	13,839.0	23,526.0	9,687.0	70.0%	
Sep-20	20,758.5	26,425.0	5,666.5	27.3%	
Oct-20	27,678.0	33,313.0	5,635.0	20.4%	
Nov-20	34,597.5				36,000.0
Dec-20	41,517.0				42,000.0
Jan-21	48,436.5				47,000.0
Feb-21	55,356.0				52,000.0
Mar-21	62,275.5				58,000.0
Apr-21	69,195.1				67,000.0
May-21	76,114.7				76,000.0
Jun-21	83,034.3				83,034.3
<b>Acceptable Variance</b>			<b>± 15%</b>		<b>0.0%</b>



**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**

- Refined plan and budget to remove original Pacific Direct Current (DC) Intertie ocean electrode in Calendar Year 2021.
- Filter bank demolition at Sylmar West began in September 2020.
- Systematic line insulator replacements on the Pacific DC Intertie resumed in October 2020.

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

- Actual costs exceed the approved budget by 20.4%, which is outside the acceptable variance. October 2020's overrun reflects the lingering impact from July 2020's significantly high overrun. The difference between October's and September's YTD expenditures is \$6,888K, which is near the monthly approved budget of \$6,919.5K.
- Cost overrun is primarily caused by **Sylmar Filter Replacement Project (Job O1373)** and **Capital Improvements to the Pacific DC Intertie Line (Job B9011)**. The Pacific DC Intertie Scheduled Inspection and Repair period, which runs from mid-October to early November, allows for work on de-energized equipment at Sylmar Converter

Station and on the transmission line, producing an uptick in expenditures. Charges for work on these two jobs are 60% reimbursable. 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.

- No re-estimates could be entered into the budget system, since it is locked. The year-end projection is \$100M.

Total Project Approved from Inception to FY 28/29	\$1,574.5M
Projects Approved to Date	\$1,227.2M
Project Actuals to Date	\$951.4M

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

- Review and re-estimate Year to Date (YTD) expenditures for FI 21212 as FY 20/21 progresses, recognizing that, due to the fiscal impact of the pandemic, the FY 20/21 budget was cut in last year's budget cycle to accommodate the new Power Rate Case.
- 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)

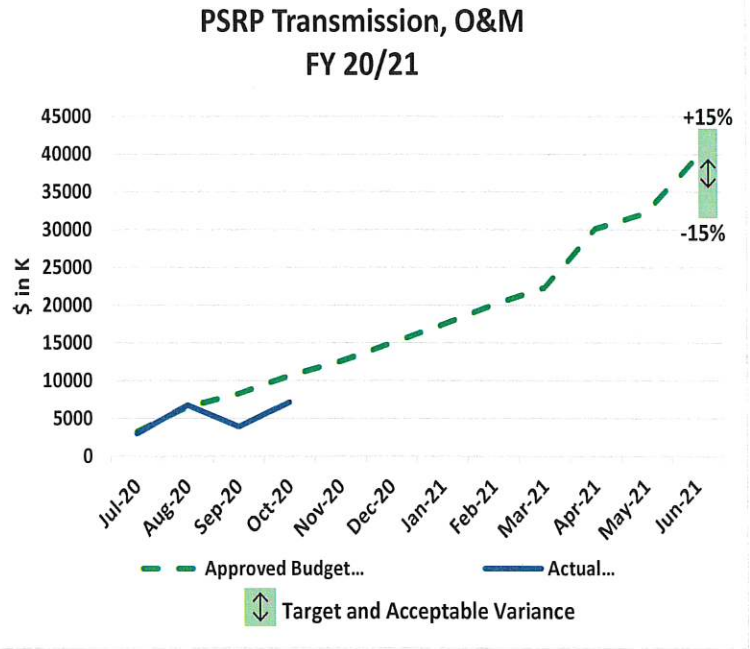
RESPONSIBLE MANAGER: Ruben Hauser, Power Transmission and Distribution REPORTING PERIOD: October 2020

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

TARGET & ACCEPTABLE VARIANCE (FY 20/21): Target = \$39,499.9K; 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-20	3,269.0	2,986	-283.0	-8.7%	
Aug-20	6,538.4	6,753	214.6	3.3%	
Sep-20	8,294.9	3,927	-4367.9	-52.7%	
Oct-20	10,664.8	7,139	-3525.8	-33.1%	
Nov-20	12,560.8				
Dec-20	14,930.8				
Jan-21	17,379.7				
Feb-21	20,065.7				
Mar-21	22,317.2				
Apr-21	30,138.0				
May-21	32,192.0				
Jun-21	39,499.9				
Acceptable Variance			±15%		



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

**1. BACKGROUND / PURPOSE**

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

**2. ACHIEVEMENTS / MILESTONES MET**

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

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

- The KPI is outside its 15% threshold set for its goal.
- October 2020 YTD actuals are under due to the following:
  - Job B0200 (LA Basin Tower Painting Program) – the \$1.1M contract is still under development and a purchase order is expected to be issued in FY 21/22. The underrun exists due to no contract in place and no service work occurring. Budget for

Job B0200 will be transitioned into Job B9010 (Improvements to In-Basin Towers and Right of Ways) once IBIS reopens.

- Job B1275 (Operation of Sylmar Converter Station East) – the underrun is primarily due to the timing of major renewals; the Property Insurance Program renews in November 2020 (approximately \$300K) and the Excess Liability Insurance Program renews in April 2021. It is expected that expenditures will align with the budgeted amounts by fiscal year-end. The job also received a \$4.98M reimbursement from Participants on Joint Venture projects (Southern California Edison, Burbank, Glendale, and Pasadena) due to the Pacific Direct-Current (DC) Intertie.
- Job B1280 (Maintenance Sylmar Converter Station East) – the underrun is due to a \$3.4M reimbursement from Participants on Joint Venture projects (Southern California Edison, Burbank, Glendale, and Pasadena) due to the Pacific DC Intertie.
- The underrun in the above jobs is partially offset by Job B1232 (Overhead Transmission Lines O&M), which was not budgeted correctly and has a \$535K overrun in Labor and Overtime. The job will need to be re-estimated and is due to the amount of work required to clear homeless encampments from our right of ways as well as removing brush. Power Transmission Division has had to respond to

numerous complaints every day from Real Estate, Right of Way Engineering and the Council Districts.

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

- The funds for LA Basin Tower Painting Program will be pushed out to FY 21/22. A property insurance payment is anticipated in November 2020. Until then, the division will continue to have an underrun.

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

RESPONSIBLE MANAGER: Kishan Kasondra  
Power Planning, Development, and Engineering Division

REPORTING PERIOD: October 2020

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

TARGET & ACCEPTABLE VARIANCE (FY 20/21): Target = \$5.6M per mile; Acceptable Variance = ± 15%

## STATUS

**Outside Acceptable Variance**

	Start	Finish	1Q FY20/21	2Q FY20/21	3Q FY20/21	4Q FY20/21
Tarzana – Olympic Lines 1A and 1B	10/2020	1/2021		●————●		
Fairfax-Airport Line 2	01/2021	03/2021			●————●	
Scattergood – Airport Line 1 (230 kV Upgrade)	03/2021	05/2021			●————●	

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 138 kV 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 5<sup>th</sup> 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)
  - 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 (230-kV)
- Tarzana-Olympic Line 1B, 3.21 miles (230-kV)

## 2. ACHIEVEMENTS / MILESTONES MET

- As of October 2020, 100% of the Tarzana-Olympic Lines 1A and 1B cable system has been removed, 100% of the splices have been removed, 100% of the potheads have been removed and 100% of the maintenance holes have been removed.
- During the month of October 2020, 57.3% of the Tarzana-Olympic Lines 1A and 1B project was completed.
- LAWA reimbursed LADWP \$7.7M during the month of October for Scattergood-Airport Lines 1 and 2 project.

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

	Types	Target	Actuals/ Trending Cost <sup>2</sup>	Variance (%)
FY16/17	Contract Cost	\$2.7M/mile <sup>1</sup>	\$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	\$10.3 M/mile	+109.1%
	Station Cost		\$1.2M/mile	
FY20/21 (YTD)	Contract Cost	\$5.6M/mile	\$3.8M/mile	-62.5%
	Station Cost		-\$1.7M/mile	
Cumulative Cost	Contract Cost	\$5.3M/mile <sup>3</sup>	\$4.6M/mile	-15.1%
	Station Cost		\$0.5M/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.*

2. *Trending costs are costs incurred year-to-date while the circuit replacement is still on-going.*
3. *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.*

- 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.

#### **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* 12/1/20

REPORTING PERIOD: October 2020

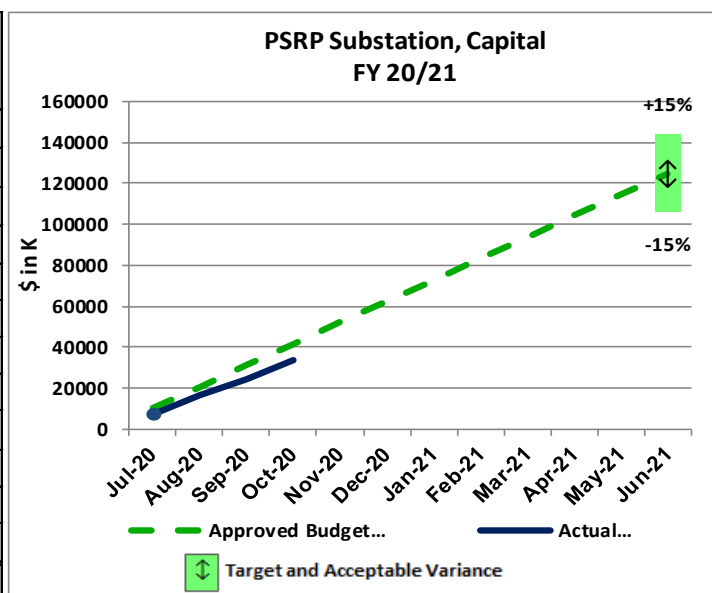
Power Planning, Development, and Engineering Division

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

TARGET & ACCEPTABLE VARIANCE (FY 20/21): Target = \$125,006.6K; Acceptable Variance = ± 15%

**STATUS:** Outside Acceptable Variance

FYTD as of:	Approved Budget (\$ in K)	Actual (\$ in K)	Variance		Re-Estimate (\$ in K)
			\$ in K	%	
Jul-20	10,417.2	6,987.0	-3,430.2	-32.9%	
Aug-20	20,834.4	16,429.0	-4,405.4	-21.1%	
Sep-20	31,251.6	24,395.0	-6,856.6	-21.9%	
Oct-20	41,668.8	34,020.0	-7,648.8	-18.4%	
Nov-20	52,086.0				44,517.5
Dec-20	62,503.2				55,015.0
Jan-21	72,920.4				65,512.5
Feb-21	83,337.6				76,010.0
Mar-21	93,754.8				86,507.5
Apr-21	104,172.0				97,005.0
May-21	114,589.3				107,502.5
Jun-21	125,006.6				125,007.0
<b>Acceptable Variance</b>			± 15%		0.0%



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

## 1. BACKGROUND / PURPOSE

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

## 2. ACHIEVEMENTS / MILESTONES

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

KPI	PSRP Replacements or Upgrades:	FYTD Actual	FYTD Target	FYE Target
<b>TRANSFORMER REPLACEMENT:</b>				
04.01.01.76	Extra High Voltage (high side >230kV – Receiving Station (RS), Switching Station (SS), High Voltage Direct Current Converter Stations)	1	1	2
04.01.01.81	High Voltage Transformers (high side 100kV to 230kV - RS, SS)	0	0	2
04.01.01.77	Medium Voltage Transformers (high side below 100kV – Distributing Station - DS)	6	9	21
<b>CIRCUIT BREAKER REPLACEMENT:</b>				
04.01.01.78	Transmission Circuit Breakers (>100kV - RS, SS, High Voltage Alternate Current Switchyards)	0	0	2
04.01.01.79	Sub-transmission Circuit Breakers (34.5kV - RS, DS)	2	9	28
04.01.01.80	Distribution Circuit Breakers (4.8kV - DS)	3	6	16
<b>SUBSTATION AUTOMATED :</b>				
04.01.03.01	Distributing or Receiving Station Upgrade/Automation	3	4	12
<b>FEEDERS AND TRUNKLINES:</b>				
04.01.01.82	34.5kV Line Positions (Reported Quarterly)	1	2	4
04.01.01.83	4.8kV Feeder Positions (Reported Quarterly)	2	4	20

Additional year-to-date achievements and milestones include:

- Substation Equipment Life Extensions:** (1) RS Transformer, (9) 34.5 kV circuit breakers, and (2) 4.8kV circuit breakers completed.

Within Acceptable Variance   Outside Acceptable Variance   Exceeds Target   Needs Attention

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

- This Functional Item (FI) is projected to underspend due to the current COVID-19 pandemic which resulted in Rotational Work Assignments for the months of July and August. 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 for the fiscal year, such as Substation Automation. No re-estimates could be entered into the budget system, since it is locked. The projected year-end expenditure for FI 211-95 is \$118M.
- FI 211-95 includes Annual (perpetual) jobs, so single estimated lifetime expenditure does not apply.

Total Project Approved From Inception to FY28/29	\$2,733.9M
Project Approved to Date	\$1,605.9M
Project Actuals to Date	\$1,343.4M

**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.

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

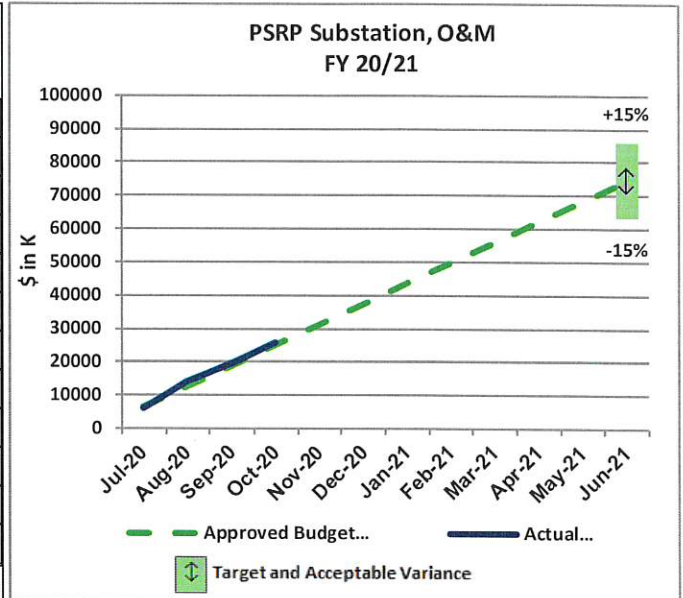
RESPONSIBLE MANAGER: Jonathan Fonti, Power Construction & Maintenance REPORTING PERIOD: October 2020

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

TARGET & ACCEPTABLE VARIANCE (FY 20/21): Target = \$74,655.2K; Acceptable Variance = ± 15%

STATUS: Within Acceptable Variance

FYTD as of:	Approved Budget (\$ in K)	Actual (\$ in K)	Variance		Re-Estimate
			\$ in K	%	
Jul-20	6,221	5,996	-225	-4%	
Aug-20	12,443	14,096	1,653	13%	
Sep-20	18,664	19,699	1,035	6%	
Oct-20	24,885	25,740	855	3%	
Nov-20	31,107				
Dec-20	37,328				
Jan-21	43,549				
Feb-21	49,770				
Mar-21	55,992				
Apr-21	62,213				
May-21	68,434				
Jun-21	74,655.2				
<b>Acceptable Variance</b>			<b>± 15%</b>		



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

## 1. BACKGROUND/PURPOSE

- Substation operations and maintenance (O&M) activities are a critical component in the Department's ability to provide continued safe and reliable power. This metric measures the planned vs. actual expenditures for O&M activities for Substation Operations in the Metro, West Los Angeles/South Los Angeles, and Valley areas, including the switching and maintenance of communication equipment.
- Electrical Station Maintenance (ESM) serves as facility manager of over 5,000 facilities in the Los Angeles basin and is responsible for maintenance and for staying in compliance with California Public Utility Commission (CPUC) regulatory obligations. As part of this compliance, ESM performs inspections for all facilities as required by CPUC. For example, CPUC General Order 174 requires that ESM perform monthly inspections on all Distributing Stations on a monthly basis.

## 2. ACHIEVEMENTS/MILESTONES MET

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

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

- A combination of emergency responses to the outage at Distributing Station (DS) - 26 in August and DS - 32 and DS -100 in October resulted in the slight overage. At DS - 26, Bank 1 relayed on differential, which resulted in an outage to several feeders. An investigation found Bank 1 4.8kV cables had failed, so crews purchased material and installed temporary 4.8kV cables to bypass the failed cables. At DS - 32, crews responded to an outage on Bank 3 caused by a flashover on the high-side bus cables inside the cable chimney. At DS -100, crews responded when Bank 2 relayed due to a mylar balloon that made its way into the 4.8kV Rear Bus causing flashover damage to several stand-off insulators.

## 4. MITIGATION PLAN AND/OR RECOMMENDATIONS

- Electrical Mechanics (EMs) and Electrical Testers that support this FI can only be hired after completing the corresponding training programs. ESM competes with other sections to hire EMs. Between now and December 2020, ESM expects to lose several EMs to promotions or retirements. In order to accommodate a demand to hire, there has been an increase in the number of classes and class size for training programs. On December 7<sup>th</sup>, 2020, ESM will receive 18 new EMs from the Training Center.



# LADWP RATES METRIC – PSRP Distribution, Capital (Power)

*Handwritten initials: JF, SCF*

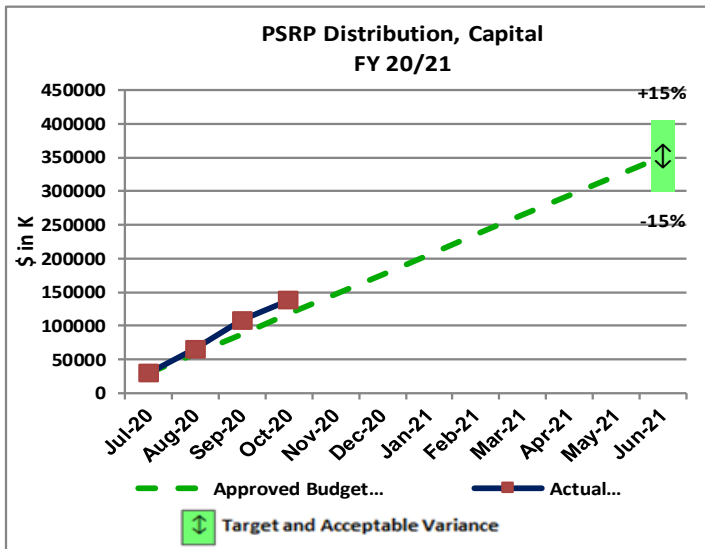
**RESPONSIBLE MANAGER:** Sager Farraj  
Power Planning Development and Engineering Division

**REPORTING PERIOD:** October 2020

**DEFINITION OF RATES METRIC:** Board Approved Annual Budget vs. Actual Expenditures For PSRP Distribution, Capital  
**TARGET & ACCEPTABLE VARIANCE (FY 20/21):** Target = \$352,273.3K; Acceptable Variance = ± 15%

**STATUS:** Outside Acceptable Variance

FYTD as of:	Approved Budget (\$ in K)	Actual (\$ in K)	Variance		Re-Estimate
			\$ in K	%	
Jul-20	29,356.1	30,149.0	792.9	2.7%	
Aug-20	58,712.2	65,802.0	7,089.8	12.1%	
Sep-20	88,068.3	108,983.0	20,914.7	23.7%	
Oct-20	117,424.4	138,488.0	21,063.6	17.9%	
Nov-20	146,780.5				146,780.5
Dec-20	176,136.6				176,136.6
Jan-21	205,792.7				205,792.7
Feb-21	234,848.8				234,848.8
Mar-21	264,204.9				264,204.9
Apr-21	293,561.0				293,561.0
May-21	322,917.1				322,917.1
Jun-21	352,273.3				352,273.3
<b>Acceptable Variance</b>			<b>± 15%</b>	<b>0.0%</b>	



**SOURCE OF DATA:** FI 21190 (KPI # 01.03.01.15)

**1. BACKGROUND / PURPOSE**

- Table above is a summary of expenditures for all Power System Reliability Program distribution capital projects.
- Below is the approved budget % of four major functions:
  - Transformers: 3% (Jobs P6309 & P6394)
  - Poles: 37% (Job P6322)
  - Crossarms: 15% (Job P6318)
  - Cables: 21% (Job P6306)

**2. ACHIEVEMENTS / MILESTONES MET**

- The Distribution Reliability spent 118% of the budget through the month of October to work on and complete the following:
  - New rack & bank installation RS-Rinaldi, RS-B, and RS-M
  - 661 transformer installations
  - 1,355 pole replacements
  - 4,460 deteriorated crossarm replacements
  - 17.0 circuit-mile of cable replacements
  - 3,024 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 October is \$21.1M, 18% over budget. This is due to Districts crews focusing resources on Power System Reliability Program distribution capital projects.

Total Project Approved From Inception to FY27/28	\$6,189.1M
Projects Approved to Date	\$3,383.7M
Project Actuals to Date	\$2,915.5M

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

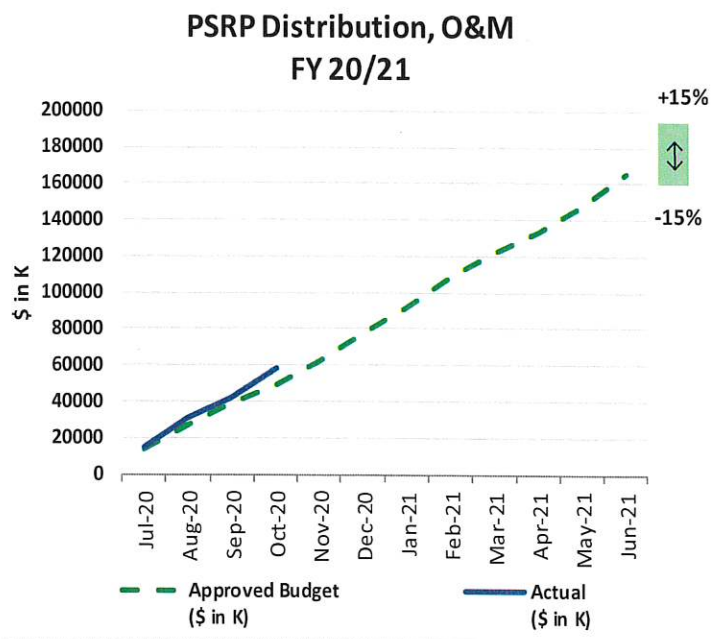
REPORTING PERIOD: October 2020

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

TARGET & ACCEPTABLE VARIANCE (FY 20/21): Target = \$165,490K; 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-20	13,675	14,331.00	656.0	4.8%	
Aug-20	26,732	30,752.00	4,020.0	15.0%	
Sep-20	38,632	41,909.00	3,277.0	8.5%	
Oct-20	49,353	58,045.00	8,692.0	17.6%	
Nov-20	62,444				
Dec-20	77,060				
Jan-21	91,653				
Feb-21	109,243				
Mar-21	122,047				
Apr-21	133,343				
May-21	147,480				
Jun-21	165,490				
<b>Acceptable Variance</b>			<b>±15%</b>		



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 17.6% over the threshold set for this metric. Due to the COVID-19 pandemic, DWP faced budget reductions and decreased back to 10 crews in August 2020. The driving spike, causing our current variance, is due to invoices that fell behind.

### 4. MITIGATION PLAN AND / OR RECOMMENDATIONS

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

# LADWP RATES/EQUITY METRIC – Transformer Replacement (Power)

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

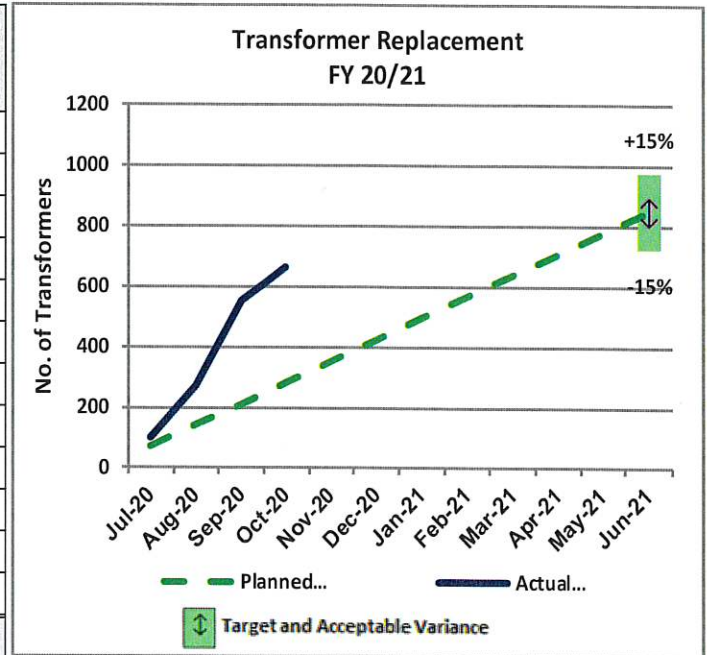
REPORTING PERIOD: October 2020

DEFINITION OF RATES METRIC: Number of Transformers Replaced Against Plan

TARGET & ACCEPTABLE VARIANCE (FY 20/21): Target = 850; Acceptable Variance = ± 15%

**STATUS:** Exceeds Target

FYTD as of:	Planned (No.)	Actual (No.)	Variance		Re-Estimate
			No.	%	
Jul-20	71	100	29	40.8%	
Aug-20	142	271	129	90.8%	
Sep-20	212	553	341	160.8%	
Oct-20	283	661	378	133.6%	
Nov-20	354				
Dec-20	425				
Jan-21	496				
Feb-21	566				
Mar-21	637				
Apr-21	708				
May-21	779				
Jun-21	850				
<b>Acceptable Variance</b>			<b>± 15%</b>		



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 283 transformers and the current actual number of transformers replaced is 661.

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

- The actual number of transformers replaced exceeds the ±15% threshold due to heat storms in August and September.

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

- PTD will continue to monitor the job as the year progresses and adjust FY goals to reflect the increase of capturing transformer work more accurately.
- PTD will continue to monitor how the work is captured and shift assets to different jobs as needed.

**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

REPORTING PERIOD: October 2020

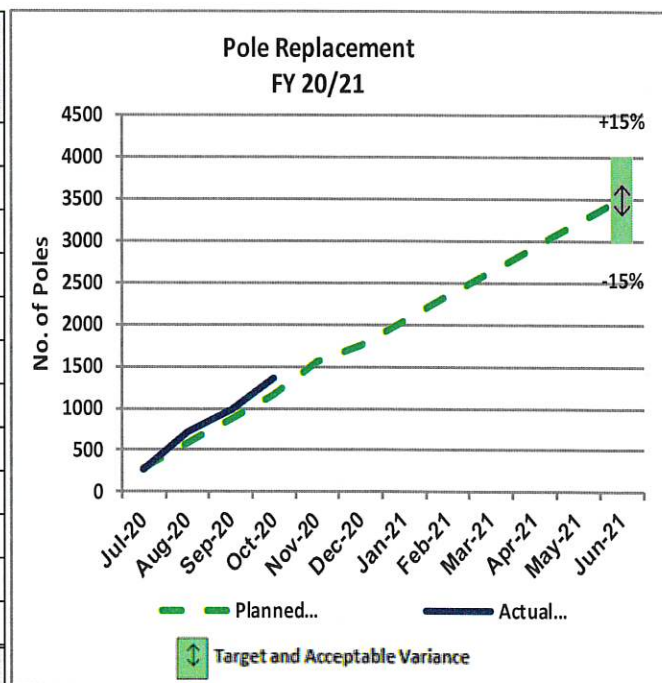
EQUITY CORE CATEGORY: Water and Power Infrastructure Investment

DEFINITION OF RATES METRIC: Number of Poles Replaced Against Plan

TARGET & ACCEPTABLE VARIANCE (FY 20/21): Target = 3,500; Acceptable Variance =  $\pm 15\%$

STATUS: Exceeds Target

FYTD as of:	Planned (No.)	Actual (No.)	Variance		Re-Estimate
			No.	%	
Jul-20	292	272	-20	-6.8%	
Aug-20	583	711	128	22.0%	
Sep-20	876	981	105	12.0%	
Oct-20	1,168	1,355	187	16.0%	
Nov-20	1,549				
Dec-20	1,752				
Jan-21	2,043				
Feb-21	2,335				
Mar-21	2,628				
Apr-21	2,919				
May-21	3,212				
Jun-21	3,500				
Acceptable Variance			$\pm 15\%$		



SOURCE OF DATA: Jobs P6322 (KPI # 04.01.01.03)

## 1. BACKGROUND / PURPOSE

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

## 2. CRITERIA

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

## 3. ACHIEVEMENTS / MILESTONES MET

- To date, the target was to replace 1168 poles and the current actual number of poles replaced is 1,355.

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

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

# LADWP RATES METRIC – Crossarm Replacement (Power)

RESPONSIBLE MANAGER: Arthur Johnson, Power Transmission and Distribution

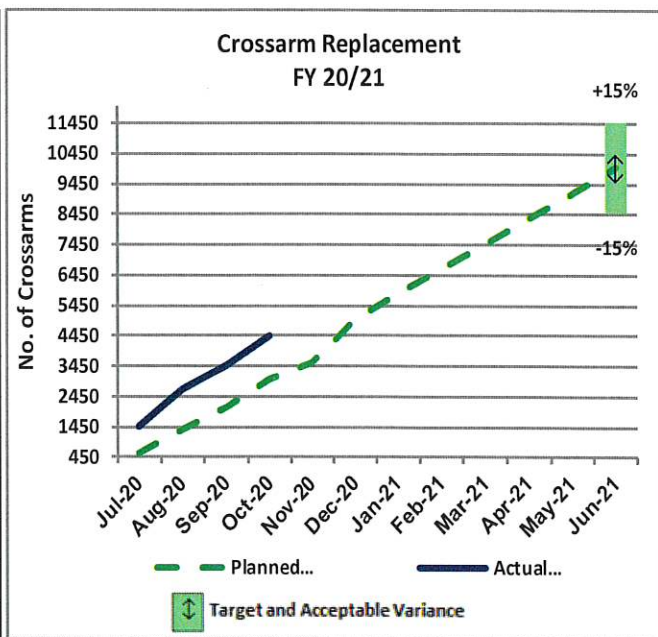
REPORTING PERIOD: October 2020

DEFINITION OF RATES METRIC: Number of Crossarms Replaced Against Plan

TARGET & ACCEPTABLE VARIANCE (FY 20/21): Target = 10,000; Acceptable Variance = ± 15%

STATUS: Exceeds Target

FYTD as of:	Planned (No.)	Actual (No.)	Variance		Re-Estimate
			No.	%	
Jul-20	600	1,449	849	141.5%	
Aug-20	1,350	2,698	1,348	99.9%	
Sep-20	2,100	3,457	1,357	64.6%	
Oct-20	3,000	4,460	1,460	48.7%	
Nov-20	3,550				
Dec-20	5,000				
Jan-21	5,800				
Feb-21	6,630				
Mar-21	7,460				
Apr-21	8,290				
May-21	9,120				
Jun-21	10,000				
Acceptable Variance			± 15%		



SOURCE OF DATA: Jobs P6318 (KPI #04.01.01.21)

**1. BACKGROUND / PURPOSE**

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

**2. ACHIEVEMENTS / MILESTONES MET**

- To date, the target was to replace 3,000 crossarms and the current actual number of crossarms replaced is 4,460.

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

- The number of crossarms replaced falls above the ±15% threshold. The actuals exceed the target due to a more accurate capturing of the completed work through the WMIS system and the crews accurate use of charge numbers to capture the actual work performed. PTD will monitor the crossarm replacement work and shift resources if needed to ensure all PSRP goals are met.

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

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

# LADWP RATES/EQUITY METRIC – Cable Replacement (Power)

RESPONSIBLE MANAGER: Sager Farraj  
Power Planning Development and Engineering Division

REPORTING PERIOD: October 2020

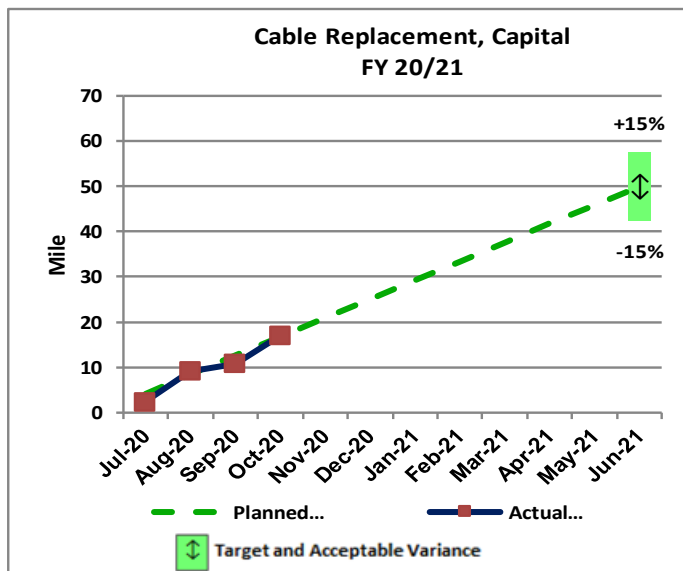
EQUITY CORE CATEGORY: Water & Power Infrastructure Investment

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

TARGET & ACCEPTABLE VARIANCE (FY 20/21): Target = 50 miles; Acceptable Variance =  $\pm 15\%$

STATUS: **Within Acceptable Variance**

FYTD as of:	Planned (Mile)	Actual (Mile)	Variance		Re-Estimate
			Mile	%	
Jul-20	4.2	2.4	-1.8	-42.9%	
Aug-20	8.4	9.2	0.8	9.5%	
Sep-20	12.6	10.8	-1.8	-14.3%	
Oct-20	16.8	17.0	0.2	1.2%	
Nov-20	21.0				21.0
Dec-20	25.0				25.0
Jan-21	29.2				29.2
Feb-21	33.4				33.4
Mar-21	37.6				37.6
Apr-21	41.8				41.8
May-21	46.0				46.0
Jun-21	50.0				50.0
<b>Acceptable Variance</b>			$\pm 15\%$		0.0%



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

## 1. NARRATIVE / BACKGROUND

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

## 2. CRITERIA

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

## 3. ACHIEVEMENTS

- Through the month of October, Distribution Construction & Maintenance completed 17.0 circuit-miles. The goal is to complete 50 circuit-miles for Fiscal Year 20/21.

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

- Variance through the month of October is 0.2 circuit-mile, 1.2% above target. This is due to District crews closing the completed jobs in the system.

## 5. MITIGATION/RECOMMENDATION

- No mitigation plan at this point.

## 6. OUTREACH STRATEGY / PLAN

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

Within Acceptable Variance



Outside Acceptable Variance



Exceeds Target



Needs Attention



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

RESPONSIBLE MANAGER: Walter Rodriguez, Power Transmission and Distribution

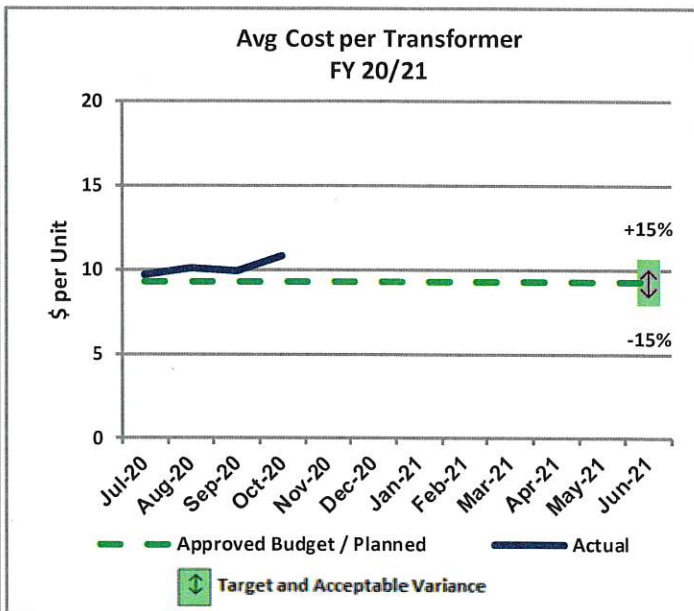
REPORTING PERIOD: October 2020

DEFINITION OF RATES METRIC: Average Unit Cost per Transformer

TARGET & ACCEPTABLE VARIANCE (FY 20/21): Target = \$9.3K per transformer: Acceptable Variance = ± 15%

**STATUS:** Outside Acceptable Variance

FYTD as of:	Approved Budget / Planned	Actual	Variance		Re-Estimate (If Applicable)
			Unit or \$	%	
Jul-20	9.3	9.7	0.4	4.6%	
Aug-20	9.3	10.1	0.8	9.0%	
Sep-20	9.3	9.9	0.6	6.8%	
Oct-20	9.3	10.8	1.5	16.5%	
Nov-20	9.3				
Dec-20	9.3				
Jan-21	9.3				
Feb-21	9.3				
Mar-21	9.3				
Apr-21	9.3				
May-21	9.3				
Jun-21	9.3				
<b>Acceptable Variance</b>			± 15%		



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 \$9.3K per unit.

**2. ACHIEVEMENTS / MILESTONES MET**

- As of October 31, the target was to replace 283 transformers at 33% of the FY goal. PTD has completed replacement of 661 transformers, which is 78% of the fiscal year goal with a current average cost of \$10.8 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. Some improvements have been implemented.
- PTD is working with PNBDTA on refining the mapping of AC jobs and providing the most accurate cost per unit.
- PTD is monitoring and providing recommendations as needed.

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

RESPONSIBLE MANAGER: *Water Rodriguez* Power Transmission and Distribution

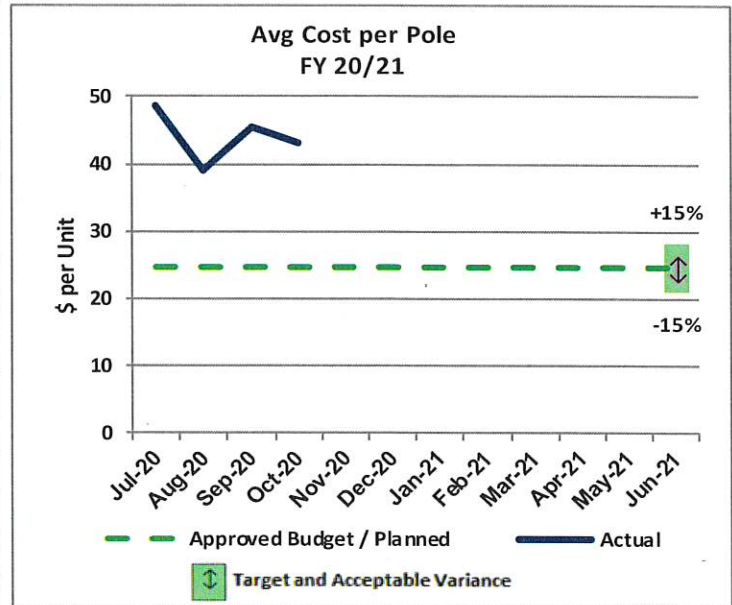
REPORTING PERIOD: October 2020

DEFINITION OF RATES METRIC: Average Unit Cost per Pole

TARGET & ACCEPTABLE VARIANCE (FY 20/21): Target = \$24.7K per pole; Acceptable Variance = ± 15%

STATUS: Outside Acceptable Variance

FYTD as of:	Approved Budget / Planned	Actual	Variance		Re-Estimate (If Applicable)
			Unit or \$	%	
Jul-20	24.7	48.5	23.8	96.2%	
Aug-20	24.7	39	14.3	57.8%	
Sep-20	24.7	45.5	20.8	84.1%	
Oct-20	24.7	43	18.3	73.9%	
Nov-20	24.7				
Dec-20	24.7				
Jan-21	24.7				
Feb-21	24.7				
Mar-21	24.7				
Apr-21	24.7				
May-21	24.7				
Jun-21	24.7				
<b>Acceptable Variance</b>			± 15%		



SOURCE OF DATA: Jobs P6322 (KPI # 04.01.01.72)

### 1. BACKGROUND / PURPOSE

- Replace 3,500 deteriorated power poles due to age or other damage. Power Transmission and Distribution (PTD) maintains approximately 321,000 poles in its system. Power poles have an average life span of fifty years. Power poles support switches, light fixtures, transformers, and underground cables transitioning to an overhead termination, communication cables, crossarms and conductors at different voltage levels. PTD has a target replacement cost of \$24.7K per unit.

### 2. ACHIEVEMENTS / MILESTONES MET

- As of October 31, our current year to date target was a replacement of 1,168 power poles at 33% of the FY goal. PTD has completed replacement of 1,355 power poles, which is 39% of the FY goal with a current average cost of \$43K per unit.

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

- PTD and Contract Operations personnel are outside the acceptable variance for this month due to increased crew sizes and increased use of specialized equipment (helicopters, oversized

cranes, etc.) to perform the more complex pole replacements.

- WMIS is the system used to capture time and work orders from employees working on the pole replacements. The number of crews and number of employees that make up each crew may vary based on the location, type of poles being replaced, specialized equipment utility, and other factors that the pole replacement job entails. The number of crews, the number of employees on each crew, and how time is entered by each employee affects WMIS reporting, which consequently affects the cost per unit average, which is 73.9% which is outside the acceptable unit cost on this Multi-Year Expenditure.
- The cost of the pole replacement and the number of crews needed to perform these jobs are affected by the following: complexity/ease of replacement, location and other mitigating factors, such as the introduction of alternative poles.

### 4. MITIGATION PLAN AND / OR RECOMMENDATIONS

- PTD will monitor and audit unit costs as we work with Power New Business Development and

Technical Application (PNBDTA) to refine accounting for these jobs.

- PTD will 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

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

RESPONSIBLE MANAGER: Walter Rodriguez, Power Transmission and Distribution

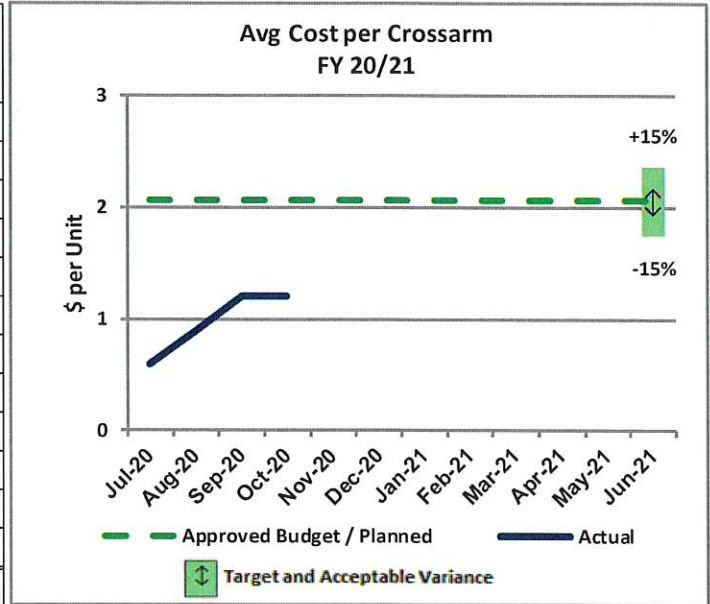
REPORTING PERIOD: October 2020

DEFINITION OF RATES METRIC: Average Unit Cost per Crossarms

TARGET & ACCEPTABLE VARIANCE (FY 20/21): Target = \$2.1K per crossarm: Acceptable Variance = ± 15%

**STATUS:** Exceeds Target

FYTD as of:	Approved Budget / Planned	Actual	Variance		Re-Estimate (If Applicable)
			Unit or \$	%	
Jul-20	2.1	0.6	(1.5)	-70.9%	
Aug-20	2.1	0.9	(1.2)	-56.3%	
Sep-20	2.1	1.2	(0.9)	-41.7%	
Oct-20	2.1	1.2	(0.9)	-41.7%	
Nov-20	2.1				
Dec-20	2.1				
Jan-21	2.1				
Feb-21	2.1				
Mar-21	2.1				
Apr-21	2.1				
May-21	2.1				
Jun-21	2.1				
<b>Acceptable Variance</b>			<b>± 15%</b>		



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 \$2.1K per unit.

replacement costs will fluctuate depending on the difficulty factor of the crossarm replacement. Contributing factors can be conductor size, whether or not equipment is installed on crossarm, if conductor terminates on crossarm or if crossarm has conductor carrying more than one voltage.

### 2. ACHIEVEMENTS / MILESTONES MET

- As of October 31, our current year to date target was to replace 3,000 crossarms which is 30% of the FY goal. PTD has completed the replacement of 4,460 crossarms, which is 45% of the FY goal, with a current average cost of \$1.2K per unit.

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

- PTD is exceeding the target and there is a variance of \$0.9K per unit. For the month of October, the average cost is \$1.2K, which is 41.7% under the acceptable target. Crossarm

### 4. MITIGATION PLAN AND / OR RECOMMENDATIONS

- PTD will 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.

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

RESPONSIBLE MANAGER: Walter Rodriguez, Power Transmission and Distribution

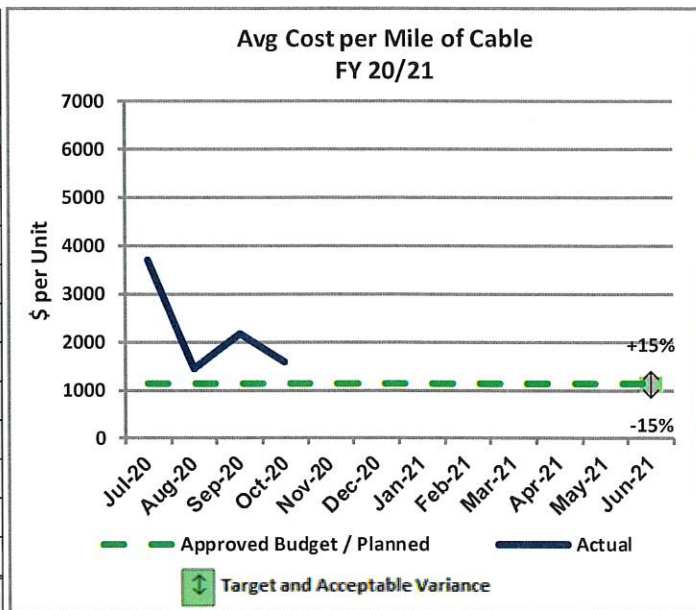
REPORTING PERIOD: October 2020

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

TARGET & ACCEPTABLE VARIANCE (FY 20/21): Target = \$1133K per mile of cable replaced; : Acceptable Variance = ± 15%

STATUS: **Outside Acceptable Variance**

FYTD as of:	Approved Budget / Planned	Actual	Variance		Re-Estimate (If Applicable)
			Unit or \$	%	
Jul-20	1133.0	3691.6	2558.6	225.8%	
Aug-20	1133.0	1459.3	326.3	28.8%	
Sep-20	1133.0	2163.0	1030.0	90.9%	
Oct-20	1133.0	1587.0	454.0	40.1%	
Nov-20	1133.0				
Dec-20	1133.0				
Jan-21	1133.0				
Feb-21	1133.0				
Mar-21	1133.0				
Apr-21	1133.0				
May-21	1133.0				
Jun-21	1133.0				
Acceptable Variance			± 15%		



SOURCE OF DATA: Jobs P6306 (KPI # 04.01.01.74)

## 1. BACKGROUND / PURPOSE

- Replace 50 miles of 4.8KV and 34.5KV underground (4.8-kV and 34.5-kV) distribution cables that require periodic upgrading because of load growth, failures due to storm damage, accidents, inherent defects, deterioration, age or advancements in materials and in power distribution techniques. Power Transmission and Distribution (PTD) has a target replacement cost of \$1133.0K per mile.

## 2. ACHIEVEMENTS / MILESTONES MET

- PTD's annual target is replacement of 50 miles of cable. The actual cable replacement accounted for in October totals 17 miles.

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

- Average cost per mile of cable is \$1587K which is outside the acceptable target for the month of October.
- 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 monitor job performance and ensure that time, materials, and labor are being accounted for accurately and appropriately.
- PTD will 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.

Within Acceptable Variance



Outside Acceptable Variance



Exceeds Target



Needs Attention





# **Water System**



# LADWP RATES METRIC – WATER DISTRIBUTION INFRASTRUCTURE POSITIONS (WATER)

RESPONSIBLE MANAGER: Breonia Lindsey/Sandra Foster

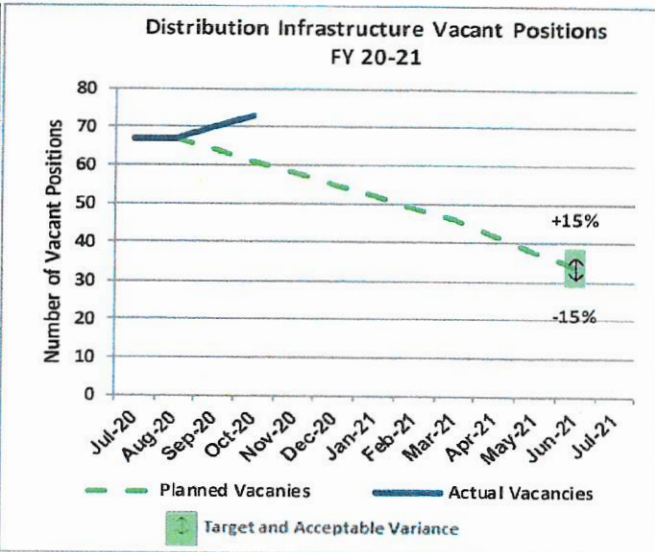
REPORTING PERIOD: October 2020

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

TARGET & ACCEPTABLE VARIANCE (FY 20/21): Vacant budgeted Water Distribution Infrastructure field positions at 34 or less by the end of the fiscal year, ±15%

STATUS: Outside Acceptable Variance

FYTD as of:	Planned Vacancies	Actual Vacancies	Variance		Re-Estimate (If Applicable)
			# Vacancies	%	
Jul-20	67	67	0	0.0%	
Aug-20	67	67	0	0.0%	
Sep-20	64	70	6	9.4%	
Oct-20	61	73	12	19.7%	
Nov-20	58				
Dec-20	55				
Jan-21	52				
Feb-21	49				
Mar-21	46				
Apr-21	42				
May-21	38				
Jun-21	34				
<b>Acceptable Variance</b>			<b>± 15%</b>		



SOURCE OF DATA: Hiring Plan/Annual Personnel Resolution

### 1. BACKGROUND / PURPOSE

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

\*The target is to reduce vacant budgeted Water Distribution infrastructure field positions to 34 vacancies or less by the end of the fiscal year.

### & YEAR END PROJECTION

- Current rate of hiring budgeted positions is outside the acceptable variance. Due to internal transfers, promotions, and attrition the Division has been unable to reduce the number of field vacancies. The Division will continue hiring efforts to reduce the number of vacant budgeted Water Distribution field positions to 34 or less by the end of the fiscal year.

### 2. ACHIEVEMENTS/MILESTONES MET

- The Division continues hiring infrastructure employees in fiscal year 2020/21, filling existing vacancies in critical infrastructure crews.

### 4. MITIGATION PLAN AND/OR RECOMMENDATIONS

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

### 3. PERFORMANCE / VARIANCE ANALYSIS

Within Acceptable Variance  Outside Acceptable Variance  Exceeds Target  Needs Attention

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

RESPONSIBLE MANAGER: April Thang *ATM*

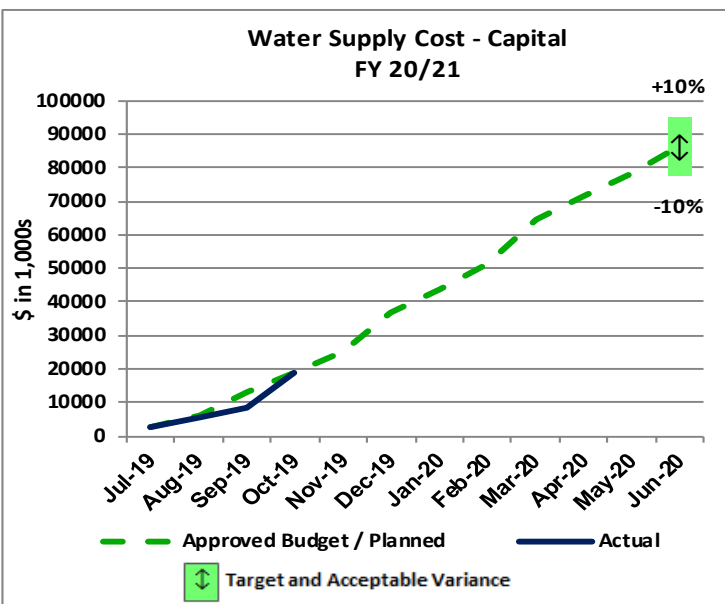
REPORTING PERIOD: October 2020

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

TARGET & ACCEPTABLE VARIANCE (FY 20/21): \$86,453K, 10 percent

STATUS: **Within Acceptable Variance**

FYTD as of:	Approved Budget / Planned	Actual	Variance		Re-Estimate (If Applicable)
			Unit or \$	%	
Jul-19	2,578	2,577	-1	0.0%	
Aug-19	5,810	5,337	-473	-8.1%	
Sep-19	13,072	8,674	-4,398	-33.6%	
Oct-19	18,819	18,541	-278	-1.5%	
Nov-19	24,953				
Dec-19	36,751				
Jan-20	43,633				
Feb-20	51,273				
Mar-20	64,678				
Apr-20	71,654				
May-20	78,510				
Jun-20	86,453				
<b>Acceptable Variance</b>			<b>± 10%</b>		



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

## 1. BACKGROUND / PURPOSE

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

## 2. ACHIEVEMENTS / MILESTONES MET

- 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 August 2020, LADWP commenced recycled water delivery to West Basin Water Recycling Facility. This service connection will yield an additional 10 AFY of recycled water deliveries.
- In October 2020, began initial design of the Stormwater Capture Parks Programs; which consists of nine project programs with a 3,088 AFY yield.

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

- The LA Aqueduct System – A&B South Project is below budgeted levels due to COVID-19 as well as some planning delays.
- The LA Aqueduct System – A&B North Project is below budgeted levels due to delays in the System A&B North, Grant Lake Roto Valve Replacement and Mono Basin Improvements jobs. However, labor and material costs are expected to increase in February and March.

- Watershed-Stormwater Capture jobs are helping offset these underruns. Overruns in Stormwater Capture Parks Projects and the Strathern Park North job were due to delayed contract payments being made to the Bureau of Engineering.

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

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

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

RESPONSIBLE MANAGER: April Thang *AThang*

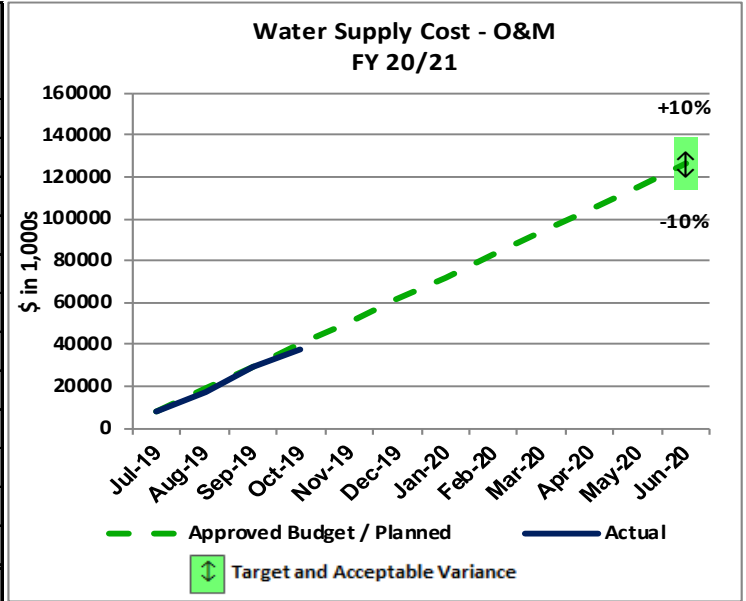
REPORTING PERIOD: October 2020

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

TARGET & ACCEPTABLE VARIANCE (FY 20/21): \$126,273K, 10 percent

**STATUS:** Within Acceptable Variance

FYTD as of:	Approved Budget / Planned	Actual	Variance		Re-Estimate (If Applicable)
			Unit or \$	%	
Jul-19	7,838	7,839	1	0.0%	
Aug-19	18,839	17,554	-1,285	-6.8%	
Sep-19	29,420	29,235	-185	-0.6%	
Oct-19	39,998	37,793	-2,205	-5.5%	
Nov-19	50,571				
Dec-19	61,344				
Jan-20	72,117				
Feb-20	82,890				
Mar-20	93,663				
Apr-20	104,436				
May-20	115,305				
Jun-20	126,273				
<b>Acceptable Variance</b>			± 10%		



SOURCE OF DATA: Fls 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 94 preventative maintenance tasks for 96 pump station facilities and 70 regulatory bi-weekly maintenance on 45 emergency backup IC Engine units located throughout the Water System.
- There have been four 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 *ATh*

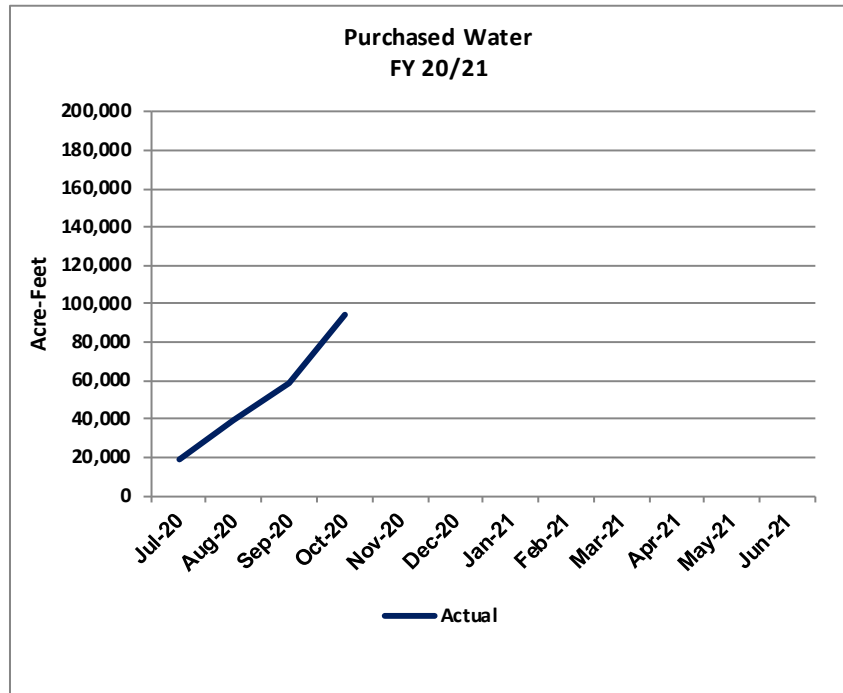
**REPORTING PERIOD:** October 2020

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

**TARGET & ACCEPTABLE VARIANCE (FY 20/21):** N/A - for information only

**STATUS:** Information Only

FYTD as of:	Actual
Jul-20	19,235
Aug-20	39,229
Sep-20	58,245
Oct-20	94,340
Nov-20	
Dec-20	
Jan-21	
Feb-21	
Mar-21	
Apr-21	
May-21	
Jun-21	



**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.
- Due to drier weather conditions, the amount of purchased water is currently higher than in years with normal conditions.

**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 *Gregory R. Reed*

REPORTING PERIOD: October 2020

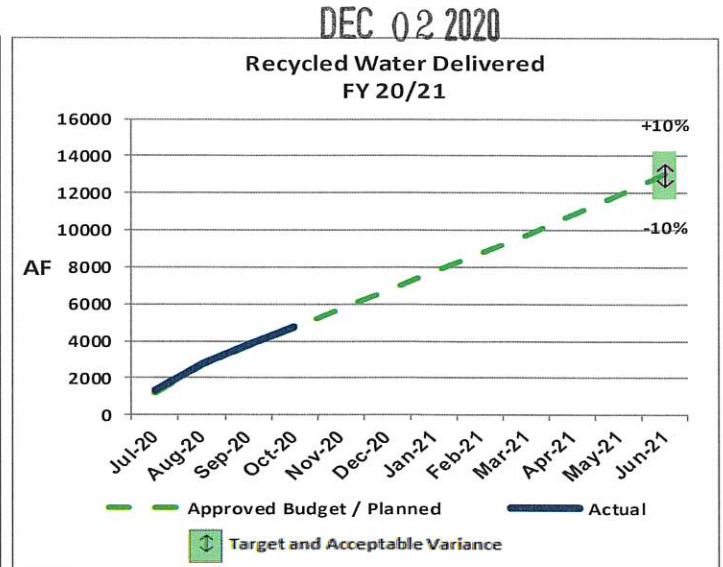
DEFINITION OF RATES METRIC: Annual quantity of recycled water delivered in acre-feet (AF) against plan

TARGET & ACCEPTABLE VARIANCE (Fiscal Year FY 20/21): 13,000 AF, 10%

GREGORY REED

STATUS: Within Acceptable Variance

FYTD as of:	Approved Budget / Planned	Actual	Variance		Re-Estimate (If Applicable)
			AF	%	
Jul-20	1,200	1,298	98	8.1%	
Aug-20	2,700	2,716	16	0.6%	
Sep-20	3,700	3,786	86	2.3%	
Oct-20	4,700	4,747	47	1.0%	
Nov-20	5,700				
Dec-20	6,700				
Jan-21	7,700				
Feb-21	8,700				
Mar-21	9,700				
Apr-21	10,800				
May-21	11,900				
Jun-21	13,000				
Acceptable Variance			± 10%		



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 4,747 AF of recycled water, which is approximately 1.0% above the planned goal for FY 20-21.

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

- Within acceptable variance

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

- Continue to deliver recycled water to existing customers.



# LADWP RATES METRIC – STORMWATER CAPACITY (Water)

RESPONSIBLE MANAGER: David Pettijohn

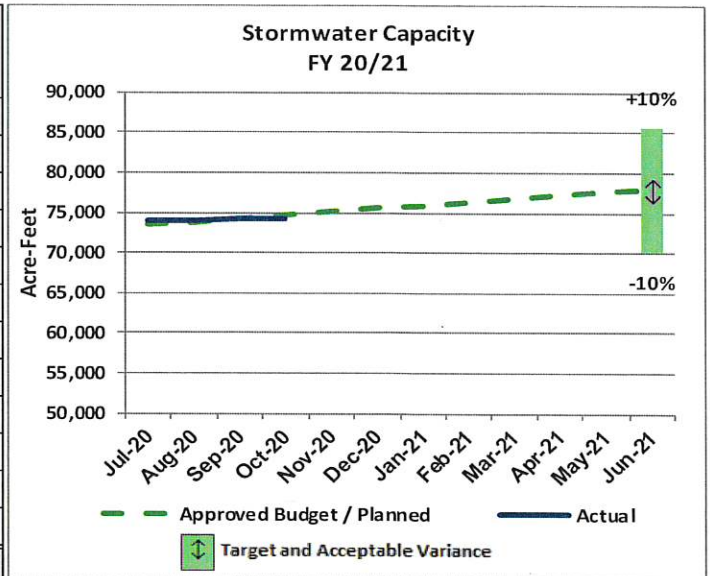
REPORTING PERIOD: October 2020

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

TARGET & ACCEPTABLE VARIANCE (FY 20/21): 78,000 AFY; 10 percent variance

STATUS: Within Acceptable Variance

FYTD as of:	Approved Budget / Planned	Actual	Variance		Re-Estimate (If Applicable)
			Unit or \$	%	
Jul-20	73,417	74,179	762	1.0%	
Aug-20	73,833	74,179	346	0.5%	
Sep-20	74,250	74,210	-40	-0.1%	
Oct-20	74,667	74,210	-457	-0.6%	
Nov-20	75,083				
Dec-20	75,500				
Jan-21	75,917				
Feb-21	76,333				
Mar-21	76,750				
Apr-21	77,167				
May-21	77,583				
Jun-21	78,000				
<b>Acceptable Variance</b>			± 10%		



SOURCE OF DATA: Summary of Major Stormwater Capture Projects Report

## 1. BACKGROUND / PURPOSE

- Projects to meet the Water System's long term strategic goals for improved water supply reliability, consistent with the 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 84 percent complete.
  - San Fernando Valley Distributed Stormwater Capture Projects: Lankershim Boulevard Great Street Dry Wells (49.3 AFY), Victory Goodland Median Stormwater Capture Project (97 AFY), Glenoaks & Filmore Stormwater Capture Project (86 AFY), Agnes Avenue Stormwater Capture Project (60 AFY), 60 percent complete.
  - Ben & Victory Green Street Project (67 AFY), 60 percent complete.

- Projects in Design/Planning include:
  - San Fernando Regional Park Stormwater Capture Project (200 AFY) 100 percent design in progress.
  - Silver Lake Reservoir Stormwater Capture Project (63 AFY), 30 percent design in progress.
  - Whitnall Highway Stormwater Capture Project (270 AFY), 30 percent design in progress.
  - Stormwater Capture Parks Program: Fernangeles Park (231 AFY), Valley Village Park (99 AFY), Strathern Park North (282 AFY), Valley Plaza Park North (470 AFY), Valley Plaza Park South (136 AFY), David M. Gonzales (489 AFY), North Hollywood Park (1,165 AFY), Alexandria Park (93), Whitsett Fields Park North (123), 30 percent design plans in progress.

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

- On target

## 4. MITIGATION PLAN AND/OR RECOMMENDATIONS

- Continue ongoing work as planned.

# LADWP RATES METRIC – ANNUAL GROUNDWATER PRODUCTION

## CENTRAL BASIN (Water)

*Milad Taghavi for ECD*

RESPONSIBLE MANAGER: Evelyn Cortez-Davis

REPORTING PERIOD: October 2020

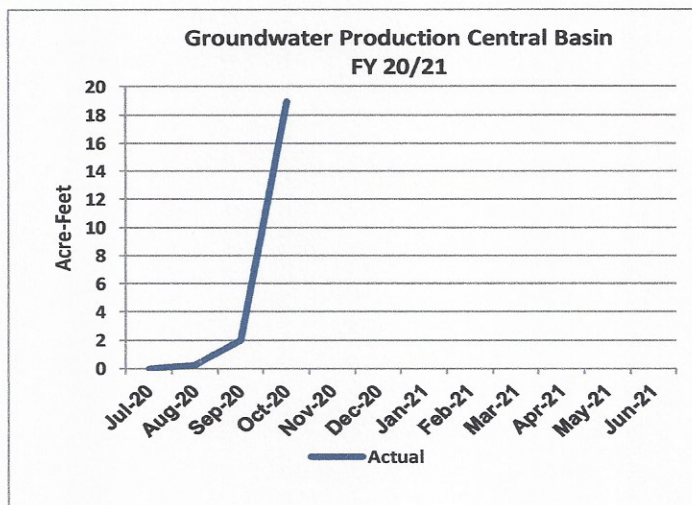
DEFINITION OF RATES METRIC: Annual groundwater production in the Central Basin in acre-feet (AF) against the plan. Information only

TARGET & ACCEPTABLE VARIANCE (FY20/21): N/A for information only.

STATUS:

Information Only

FYTD as of:	Actual
Jul-20	0.00
Aug-20	0.25
Sep-20	2.00
Oct-20	19.00
Nov-20	
Dec-20	
Jan-21	
Feb-21	
Mar-21	
Apr-21	
May-21	
Jun-21	



SOURCE DATA: Well Metered Reads

### 1. BACKGROUND / PURPOSE

- City of Los Angeles water rights in Central Basin is 16,546 AF/Y.
- Pumping goal is set at 6,476 AF (39% of water rights), due to limited groundwater pumping and distribution capacity.
- Pumping Central Basin groundwater can reduce purchases of imported water at a cost less than \$400 per AF, saving nearly \$600 per AF as compared with Tier 1 treated water purchased from MWD.

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

- The 99<sup>th</sup> 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.
- 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.

- The Manhattan Well Project is in the commissioning phase; in October 2020, some wells were put into production.

### 3. MITIGATION PLAN AND / OR RECOMMENDATIONS

- Manhattan Wells Improvement Project to install monitoring and production wells is in the commissioning phase. The estimated completion date is January 2021.
- The project to construct iron/manganese filtration removal systems for the 99<sup>th</sup> St Well Field is in the construction phase. Demolition started in June 2020. The anticipated in-service date is June 2022.

# LADWP RATES METRIC – ANNUAL GROUNDWATER PRODUCTION

## ECO SAN FERNANDO (Water)

RESPONSIBLE MANAGER: Evelyn Cortez-Davis

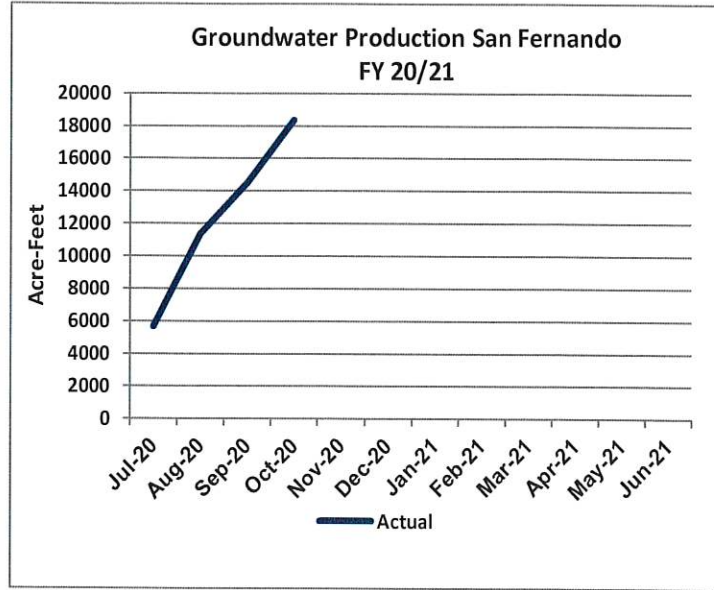
REPORTING PERIOD: October 2020

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

TARGET & ACCEPTABLE VARIANCE (FY 20/21): N/A for information only.

STATUS: Information Only

FYTD as of:	Actual
Jul-20	5,683
Aug-20	11,366
Sep-20	14,485
Oct-20	18,334
Nov-20	
Dec-20	
Jan-21	
Feb-21	
Mar-21	
Apr-21	
May-21	
Jun-21	



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 63,100 AF which is based on groundwater quality and the depth of the water table.

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

- The pumping goal is expected to be achieved by the end of the fiscal year.

### 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)

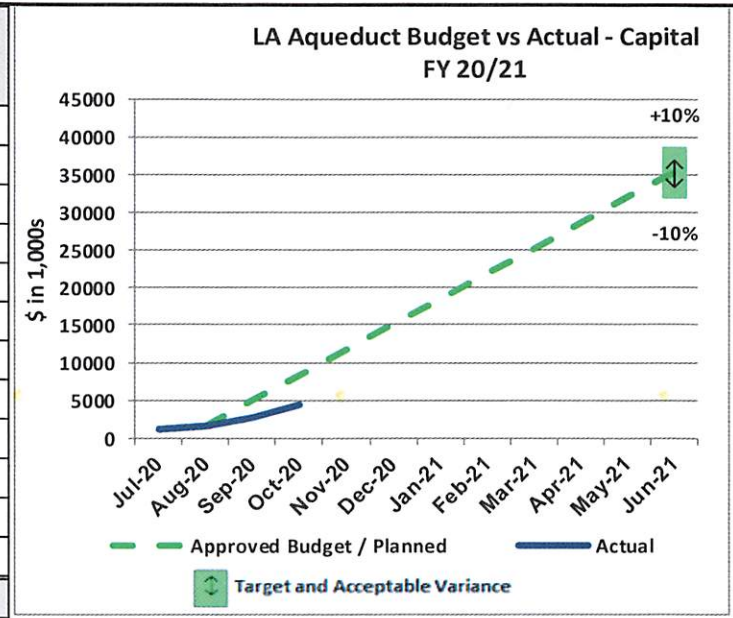
RESPONSIBLE MANAGER: Darin Willey *Darin Willey*

REPORTING PERIOD: October 2020

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

TARGET & ACCEPTABLE VARIANCE (FY 20/21): \$35,326K , 10 percent

FYTD as of:	Approved Budget / Planned	Actual	Variance		Re-Estimate (If Applicable)
			\$	%	
Jul-20	1,037	1,037	0	0.0%	
Aug-20	1,606	1,605	-1	-0.1%	
Sep-20	4,978	2,698	-2,280	-45.8%	
Oct-20	8,351	4,291	-4,060	-48.6%	
Nov-20	11,723				
Dec-20	15,096				
Jan-21	18,467				
Feb-21	21,839				
Mar-21	25,211				
Apr-21	28,583				
May-21	31,955				
Jun-21	35,326				
<b>Acceptable Variance</b>			<b>± 10%</b>		



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**

- West Portal Building is 62% complete. The foundation has been completed and the building has been delivered.
- Cain Ranch Security Fencing is 90% complete.
- Work started on the C6 Diversion Structure on Pine Creek. This project is anticipated to be completed by mid-January 2021.

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

- Aqueduct Capital is expected to be slightly below budgeted levels at fiscal year-end. Several Capital projects have been postponed due to delays in planning, permitting, and PCM work being rescheduled due to Covid-19.

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

- Capital expenditures are expected to increase as work progresses. Work on the Owens Valley Groundwater Development Plan and the Groundwater Banking Project along the Los Angeles Aqueduct is expected to increase in February 2021.

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

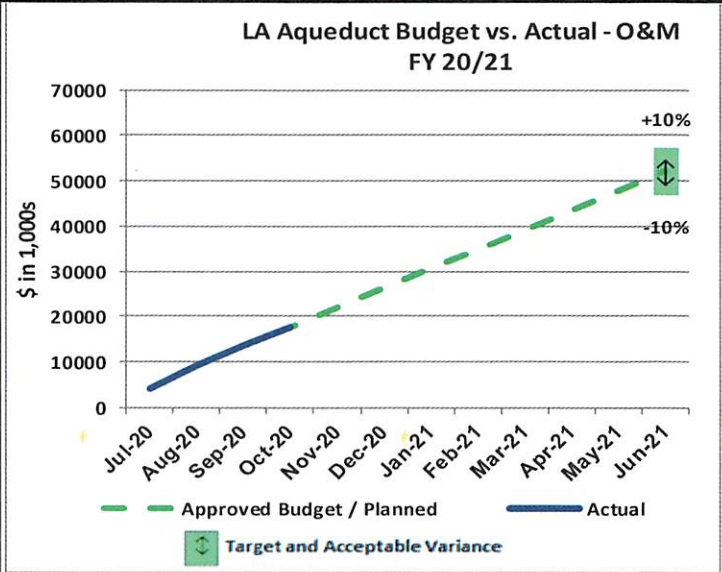
RESPONSIBLE MANAGER: Darin Willey *Darin Willey*

REPORTING PERIOD: October 2020

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

TARGET & ACCEPTABLE VARIANCE (FY 20/21): \$52,092K, 10 percent

FYTD as of:	Approved Budget / Planned	Actual	Variance		Re-Estimate (If Applicable)
			\$	%	
Jul-20	4,261	4,262	1	0.0%	
Aug-20	9,072	9,071	-1	0.0%	
Sep-20	13,381	13,501	120	0.9%	
Oct-20	17,688	17,449	-239	-1.4%	
Nov-20	21,989				
Dec-20	26,291				
Jan-21	30,593				
Feb-21	34,894				
Mar-21	39,196				
Apr-21	43,491				
May-21	47,795				
Jun-21	52,092				
Acceptable Variance			± 10%		



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

## 1. BACKGROUND / PURPOSE

- The Los Angeles Aqueduct is an important source of non-purchased water. During times of high flow in the Aqueduct (as per the first two months of the year), operations and maintenance focus is to manage the run-off.

## 2. ACHIEVEMENTS / MILESTONES MET

Fiscal Year to date Aqueduct crews have:

- Mowed 600 acres for resource clearing;
- Graded 226 miles of roads;
- Mowed 178 miles of canals and ditches;
- Cleaned 79 miles of canals and ditches;
- Installed 8 miles of fencing along LAA;
- Installed 4 check structures at Locust South and two measuring structures at Blackrock and Winterton ditches;
- Installed 34 data logger/station retrofits.

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

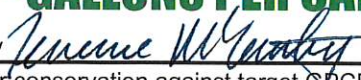
- Aqueduct Operations and Maintenance is expected to be at budgeted levels at fiscal year-end.

## 4. MITIGATION PLAN AND / OR RECOMMENDATIONS

- O&M expenditures are expected to increase at the beginning of 2021. Work on the Paradise Landfill is set to begin in January, and in early 2021 crews will be performing substantial facility maintenance at Mojave and Dry Canon.

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

RESPONSIBLE MANAGER: Terrence McCarthy



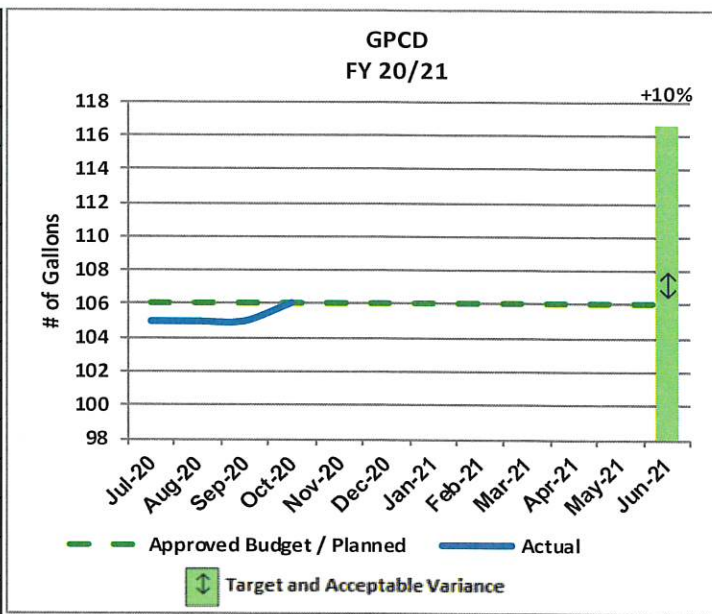
REPORTING PERIOD: October 2020

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

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

STATUS: Within Acceptable Variance

FYTD as of:	Approved Budget / Planned	Actual	Variance		Re-Estimate of Budget/Planned
			GPCD	%	
Jul-20	106	105	-1	-0.9%	
Aug-20	106	105	-1	-0.9%	
Sep-20	106	105	-1	-0.9%	
Oct-20	106	106	0	0.0%	
Nov-20	106				
Dec-20	106				
Jan-21	106				
Feb-21	106				
Mar-21	106				
Apr-21	106				
May-21	106				
Jun-21	106				
<b>Acceptable Variance</b>			<b>± 10%</b>		



SOURCE OF DATA: Water Operations Monthly Supply Tracking

## 1. BACKGROUND / PURPOSE

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

## 2. ACHIEVEMENTS / MILESTONES MET

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

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

- Customer water per capita use has increased due to lower than normal precipitation observed between June to October.
- The effects of COVID-19 has caused many businesses to limit their normal operations 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.

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

## 4. MITIGATION PLAN AND / OR RECOMMENDATIONS

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

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

RESPONSIBLE MANAGER: April Thang *AThang*

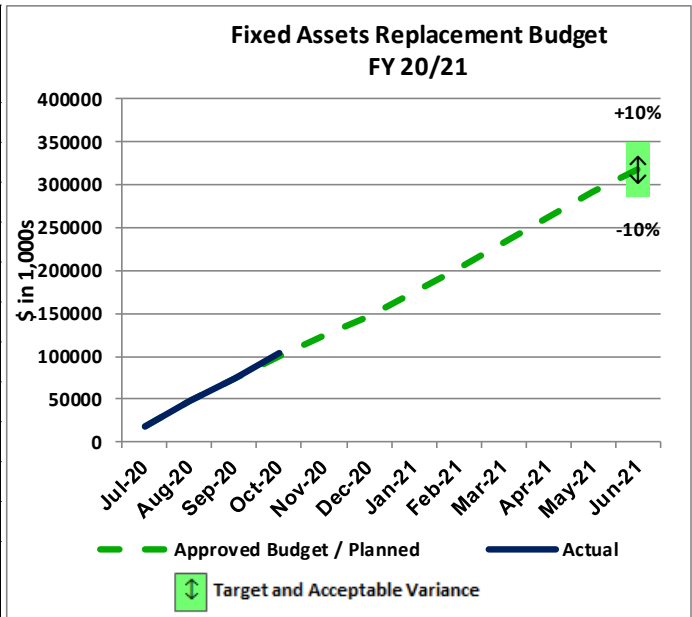
REPORTING PERIOD: October 2020

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

TARGET & ACCEPTABLE VARIANCE (FY 20/21): \$317,550K, 10 percent

STATUS: **Within Acceptable Variance**

FYTD as of:	Approved Budget / Planned	Actual	Variance		Re-Estimate (If Applicable)
			\$	%	
Jul-20	18,731	18,729	-2	0.0%	
Aug-20	48,155	48,194	39	0.1%	
Sep-20	73,794	73,736	-58	-0.1%	
Oct-20	99,821	104,750	4,929	4.9%	
Nov-20	124,475				
Dec-20	147,017				
Jan-21	174,525				
Feb-21	201,794				
Mar-21	233,163				
Apr-21	261,704				
May-21	292,075				
Jun-21	317,550				
<b>Acceptable Variance</b>			<b>± 10%</b>		



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 October 2020, installed 54,190 feet of mainline.
- As of October 2020, installed 4,595 feet of the open trench portion of the 54-inch diameter steel pipe, Foothill TL Unit 3 Phase I and 4,257 feet of the open trench portion of 54-inch diameter earthquake resistant pipe Foothill TL Unit 3 Phase II.
- Geotechnical and geological field investigation plans for the Tinemaha Dam Replacement Project were submitted to Division of Safety of Dams for review in

August. Field investigation work is anticipated to begin in November.

- The North Haiwee Dam No. 2 Project to Road & Highway Builders was approved by the Board in September and City Council in October.
- The Green Verdugo Project construction is 75% complete. The advertisement period for the reservoir floating cover contract ended in September 2020 and Notice to Proceed for the contract is expected to be issued in February 2021.

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

- Expenditure of the fixed assets replacement was going up within acceptable variance for the reporting period. The overrun is attributed to last fiscal year's delayed Bureau of Engineering (BOE) Invoices and progress payments of Phase 1 for Century Trunk Line – Unit 1 project that are being

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

processed this fiscal year. Projected expenditure of this job will be reviewed and budget will be re-estimated as necessary to cover the anticipated construction cost by the end of this fiscal year.

**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: October 2020

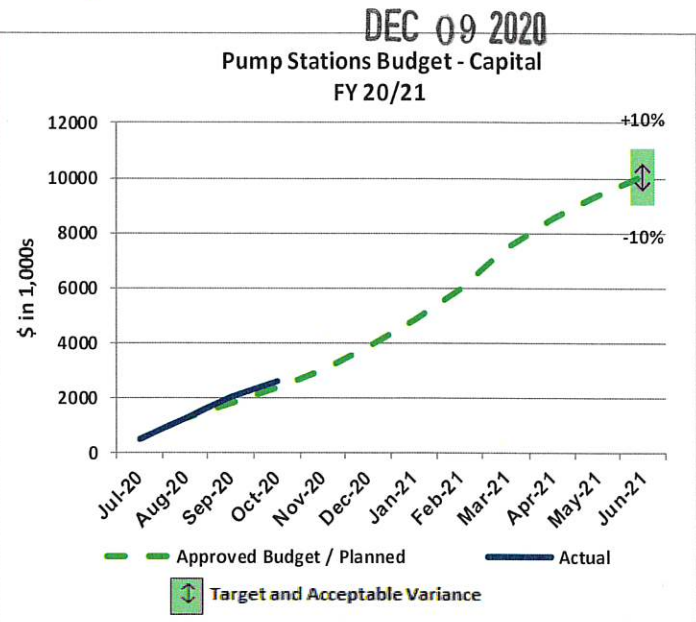
DEFINITION OF RATES METRIC: Board approved annual budget vs actual expenditures.

TARGET & ACCEPTABLE VARIANCE (FY 20/21): \$10.1M, 10 percent

GREGORY REED

STATUS: Within Acceptable Variance

FYTD as of:	Approved Budget / Planned	Actual	Variance		Re-Estimate (If Applicable)
			\$	%	
Jul-20	477	477	0	0.0%	
Aug-20	1,234	1,234	0	0.0%	
Sep-20	1,810	2,053	243	13.4%	
Oct-20	2,399	2,602	203	8.5%	
Nov-20	3,016				2,793
Dec-20	3,861				3,527
Jan-21	4,821				4,375
Feb-21	5,937				5,381
Mar-21	7,424				6,756
Apr-21	8,495				7,717
May-21	9,381				8,491
Jun-21	10,055				9,055
Acceptable Variance			± 10%		-9.9%



SOURCE OF DATA: FI 23220

## 1. BACKGROUND / PURPOSE

- The Pump Stations program includes pump and motor replacement projects, pump station retrofit, and major upgrades/replacement of pump station facilities.
- FY20/21 goals include replacing eight pumps and/or motors.
- Goals also include completing design of Redmont Pump Station, completing procurement and installation of Griffith Park Pump Station No.115, completing final planning of Van Norman Pump Station No.1, finalizing the preliminary planning of Garvanza Pump Station Building Replacement, and completing the geotechnical investigation and survey work needed to make a recommendation on property acquisition needed for Victory Pump Station.

## 2. ACHIEVEMENTS / MILESTONES MET

- Through October 2020, three pumps and/or motors have been replaced out of the eight planned for the FY20/21.

- Griffith Park Pump Station No. 115 pump skid system contract was awarded in July 2020.

## 3. PERFORMANCE / VARIANCE ANALYSIS AND YEAR-END PROJECTION

- Budget has been re-estimated to reflect the delay of the equipment delivery for Griffith Park Pump Station No.115. The expected delivery date is November 2021 and the delay is due to COVID-19 related impacts on vendor's supply chain.
- The Redmont Pump Station schedule has been delayed by one month due to pump motor redesign, the need to create shop drawings and the need for construction estimates from PCM, since PCM elected to construct the project. Design is anticipated to be completed in April 2021.
- Victory Pump Station was put on hold until February 2022 to allow for property acquisition if the geotechnical investigation and survey work prove the land to be favorable for construction.

Within Acceptable Variance  Outside Acceptable Variance  Exceeds Target  Needs Attention

- During the month of October work was performed in two pumps and/or motors and this work is anticipated to be completed during the month of November.

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

- Since Victory Pump Station design is on hold, the team will continue working on both the Geotechnical and Survey reports, 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.
- Redmont Pump Station project team will continue to follow up with PCM and will proceed with shop drawings and finalizing design.

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

RESPONSIBLE MANAGER: Gregory R. Reed

REPORTING PERIOD: October 2020

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

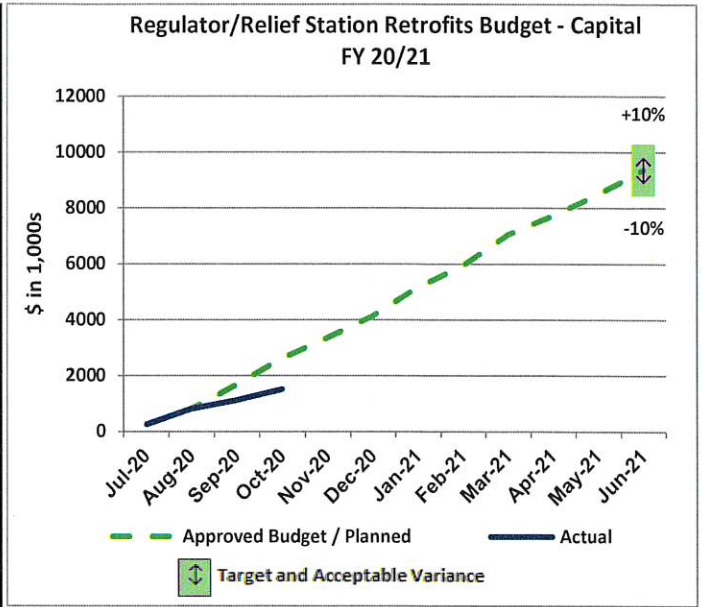
GREGORY REED

TARGET & ACCEPTABLE VARIANCE (FY 20/21): \$9.4M, 10 percent

STATUS: Exceeds Target

DEC 14 2020

FYTD as of:	Approved Budget / Planned	Actual	Variance		Re-Estimate (If Applicable)
			\$	%	
Jul-20	249	249	0	0.0%	
Aug-20	811	811	0	0.0%	
Sep-20	1,678	1,126	-552	-32.9%	
Oct-20	2,617	1,507	-1,110	-42.4%	
Nov-20	3,348				
Dec-20	4,125				
Jan-21	5,163				
Feb-21	5,938				
Mar-21	7,050				
Apr-21	7,721				
May-21	8,482				
Jun-21	9,357				
<b>Acceptable Variance</b>			± 10%		



SOURCE OF DATA: FI 24150

**1. BACKGROUND / PURPOSE**

- Regulator/relief stations are necessary to maintain and preserve 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.

- Retrofits were completed under budget due to the ability to rebuild the valves and use existing valves in stock rather than buying new ones.

**2. ACHIEVEMENTS / MILESTONES MET**

- Through October 2020, four regulator stations have been retrofitted.

**3. PERFORMANCE / VARIANCE ANALYSIS AND YEAR-END PROJECTION**

- Only one retrofit was completed during the month of October due to the handling of other priorities and the shortage of crews because of job re-assignments and staffing restrictions.

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

- Continue ongoing work as planned.

Within Acceptable Variance  Outside Acceptable Variance  Exceeds Target  Needs Attention

# LADWP RATES METRIC – MAINLINE REPLACEMENT (Water)

RESPONSIBLE MANAGER: Breonia Lindsey/Sandra Foster

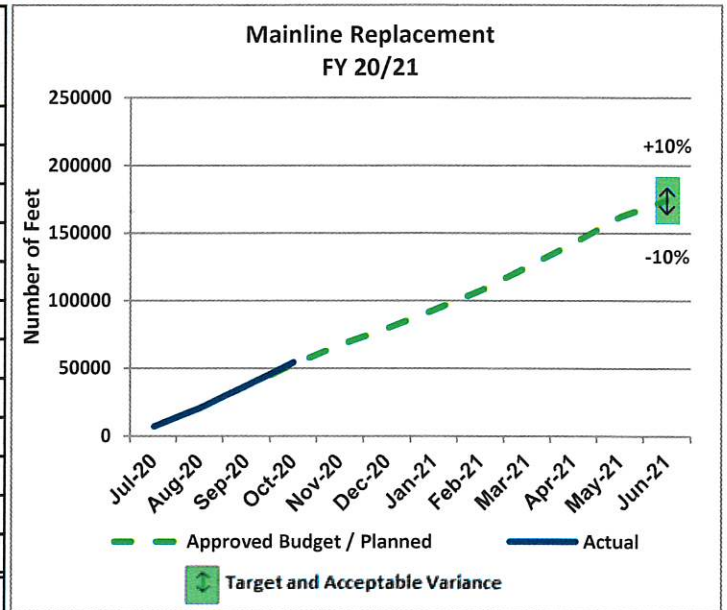
REPORTING PERIOD: October 2020

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

TARGET &amp; ACCEPTABLE VARIANCE (FY 20/21): 174,000 feet, ±10%

 STATUS: Within Acceptable Variance

FYTD as of:	Approved Budget / Planned	Actual	Variance		Re-Estimate (If Applicable)
			Feet	%	
Jul-20	6,895	6,895	0	0.0%	
Aug-20	20,580	20,580	0	0.0%	
Sep-20	37,006	37,093	87	0.2%	
Oct-20	52,801	54,190	1389	2.6%	
Nov-20	66,980				
Dec-20	79,269				
Jan-21	92,861				
Feb-21	107,306				
Mar-21	124,590				
Apr-21	142,161				
May-21	161,766				
Jun-21	174,000				
<b>Acceptable Variance</b>			<b>± 10%</b>		



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

## 2. ACHIEVEMENTS / MILESTONES MET

- As of October 2020, 54,190 feet of mainline have been installed.

## 4. MITIGATION PLAN AND / OR RECOMMENDATIONS

- 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 *Gregory R. Reed*

REPORTING PERIOD: October 2020

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

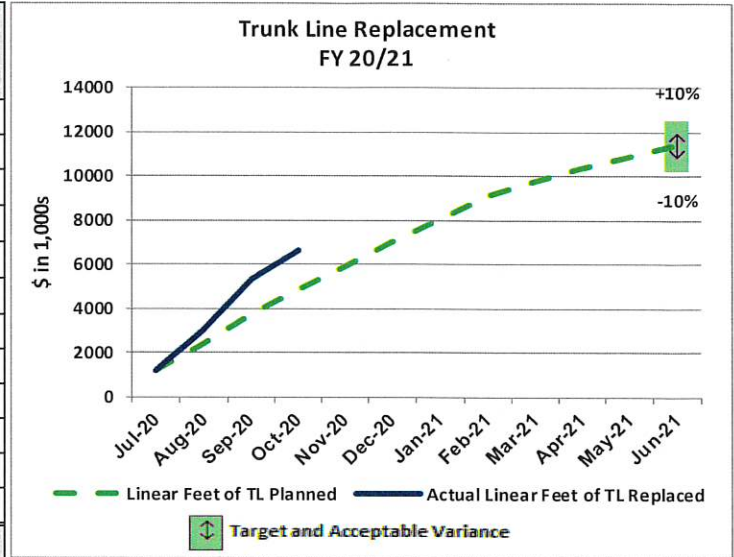
GREGORY REED

TARGET & ACCEPTABLE VARIANCE (FY 20/21): 11,400 feet, 10 percent

DEC 14 2020

**STATUS:** Exceeds Target

FYTD as of:	Linear Feet of TL Planned	Actual Linear Feet of TL Replaced	Variance		Re-Estimate (If Applicable)
			ft	%	
Jul-20	1,225	1,200	-25	-2.0%	
Aug-20	2,450	3,095	645	26.3%	
Sep-20	3,725	5,351	1,626	43.7%	
Oct-20	4,900	6,611	1,711	34.9%	
Nov-20	5,950				6,110
Dec-20	7,000				7,160
Jan-21	8,050				8,250
Feb-21	9,100				9,340
Mar-21	9,775				10,055
Apr-21	10,350				10,670
May-21	10,875				11,235
Jun-21	11,400				11,800
<b>Acceptable Variance</b>			± 10%		3.5%



**SOURCE OF DATA:** 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.

- 380 feet of trunk line was installed on RSC 7 through October 2020. RSC 7 reached 50% construction in September 2020.
- 1,430 feet of trunk line was installed on Coronado through October 2020.

**2. ACHIEVEMENTS / MILESTONES MET**

- 1,450 feet of trunk line was installed on City Trunk Line South Unit 3 through October 2020.
- 281 feet of trunk line was installed on Foothill Trunk Line through October 2020.
- 319 feet of trunk line was installed on MWD-LA 30 through October 2020.
- 385 feet of trunk line was installed on Machado Lake Pipeline through October 2020.
- 2,366 feet of trunk line was installed on Century Trunk Line Unit 1 through October 2020. Phase 2 of Century Trunk Line Unit 1 reached 100% completion on October 16, 2020.

**3. PERFORMANCE / VARIANCE ANALYSIS AND YEAR-END PROJECTION**

- Goal was revised to include approximately 400 feet of additional trunk line installation for Machado Lake Pipeline for an expected total year-end target of approximately 11,800 feet.
- Century Trunk Line Unit 1 is progressing quicker than originally anticipated.

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

- Exceeding Target.

# LADWP RATES METRIC – METER REPLACEMENT (Water)

RESPONSIBLE MANAGER: Breonia Lindsey/Sandra Foster

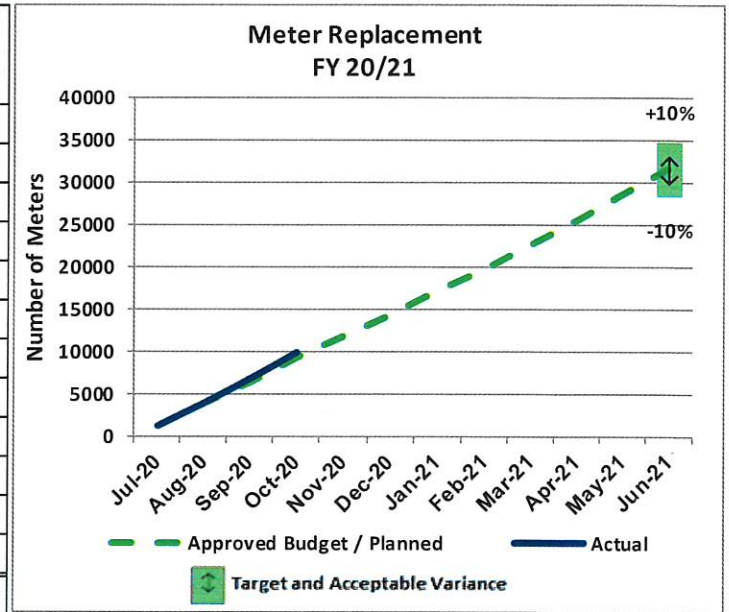
REPORTING PERIOD: October 2020

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

TARGET & ACCEPTABLE VARIANCE (FY 20/21): 31,500 meters, ±10%

STATUS: Within Acceptable Variance

FYTD as of:	Approved Budget / Planned	Actual	Variance		Re-Estimate (If Applicable)
			Meters	%	
Jul-20	1,141	1,141	0	0.0%	
Aug-20	3,860	3,860	0	0.0%	
Sep-20	6,387	6,751	364	5.7%	
Oct-20	9,245	9,893	648	7.0%	
Nov-20	11,763				
Dec-20	14,356				
Jan-21	17,135				
Feb-21	19,682				
Mar-21	22,540				
Apr-21	25,435				
May-21	28,531				
Jun-21	31,500				
<b>Acceptable Variance</b>			<b>± 10%</b>		



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. The Division anticipates meeting the meter replacement goal by the end of the fiscal year.

## 2. ACHIEVEMENTS / MILESTONES MET

- As of October 2020, 9,893 meters of the 31,500 fiscal year goal have been replaced.

## 4. MITIGATION PLAN AND / OR RECOMMENDATIONS

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

# +LADWP RATES METRIC – WATER QUALITY CAPITAL BUDGET VS ACTUAL

(Water)

RESPONSIBLE MANAGER: Gregory R. Reed



REPORTING PERIOD: October 2020

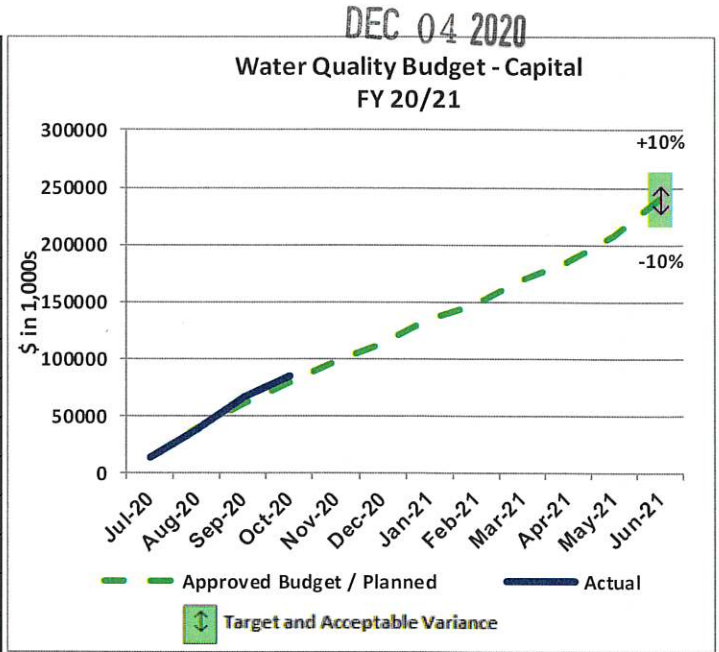
DEFINITION OF RATES METRIC: Board approved annual budget vs actual expenditures.

TARGET & ACCEPTABLE VARIANCE (FY 20/21): \$240M, 10 percent

GREGORY REED

STATUS: Within Acceptable Variance

FYTD as of:	Approved Budget / Planned	Actual	Variance		Re-Estimate (If Applicable)
			\$	%	
Jul-20	14,464	14,464	0	0.0%	
Aug-20	39,223	38,604	-619	-1.6%	
Sep-20	60,940	67,022	6,082	10.0%	
Oct-20	79,837	84,639	4,802	6.0%	
Nov-20	97,675				
Dec-20	113,029				
Jan-21	134,176				
Feb-21	147,881				
Mar-21	169,271				
Apr-21	184,214				
May-21	206,999				
Jun-21	240,080				
<b>Acceptable Variance</b>			$\pm 10\%$		



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.
- Goals for this fiscal year include reaching 90% construction of LA Reservoir UV Disinfection Plant, completing design of 99<sup>th</sup> Street Wells Filtration Plant, and completing design of San Fernando Groundwater Basin Remediation Projects - North Hollywood Centralized Treatment and Tujunga Centralized Treatment.

- 100% Design Constructability Review for the 99<sup>th</sup> Street Wells Filtration Plant was conducted in September 2020. The Forebay Repair Specifications was completed and is currently in the approval process for procurement.
- Design for the San Fernando Groundwater Basin Remediation Projects – North Hollywood Centralized Treatment and Tujunga Centralized Treatment reached 95% on October 14, 2020.

## 2. ACHIEVEMENTS / MILESTONES MET

- As of September 2020, functional testing of UV reactors for the LA Reservoir UV Disinfection Plant has been completed.

## 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

- Continue ongoing work as planned.

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

ECP

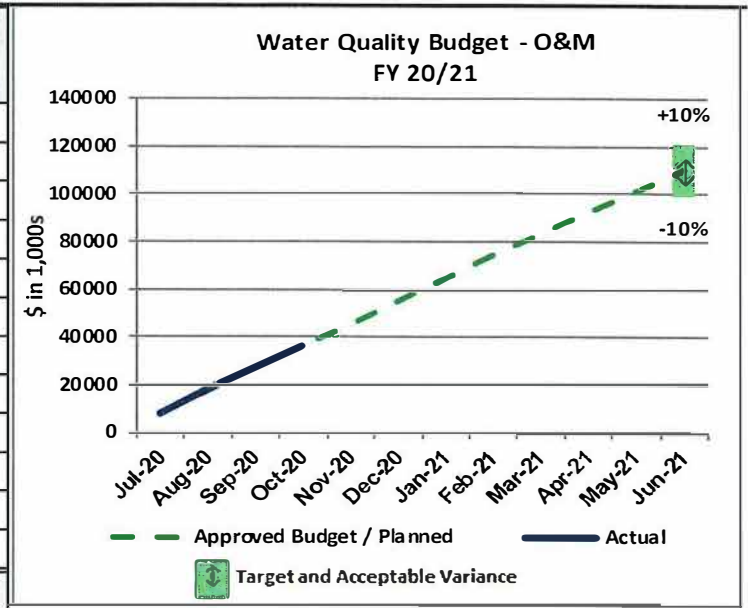
**RESPONSIBLE MANAGER:** Evelyn Cortez-Davis

**REPORTING PERIOD:** October 2020

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

**TARGET & ACCEPTABLE VARIANCE (FY 20/21):** \$110,142K 10 percent

FYTD as of:	Approved Budget / Planned	Actual	Variance		Re-Estimate (If Applicable)
			\$	%	
Jul-20	7,775	7,774	-1	0.0%	
Aug-20	17,818	17,853	35	0.2%	
Sep-20	26,643	27,356	713	2.7%	
Oct-20	35,868	35,811	-57	-0.2%	
Nov-20	45,292				
Dec-20	55,017				
Jan-21	64,542				
Feb-21	74,066				
Mar-21	83,391				
Apr-21	92,116				
May-21	101,110				
Jun-21	110,142				
<b>Acceptable Variance</b>			± 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



RESPONSIBLE MANAGER: Nelson Mejia

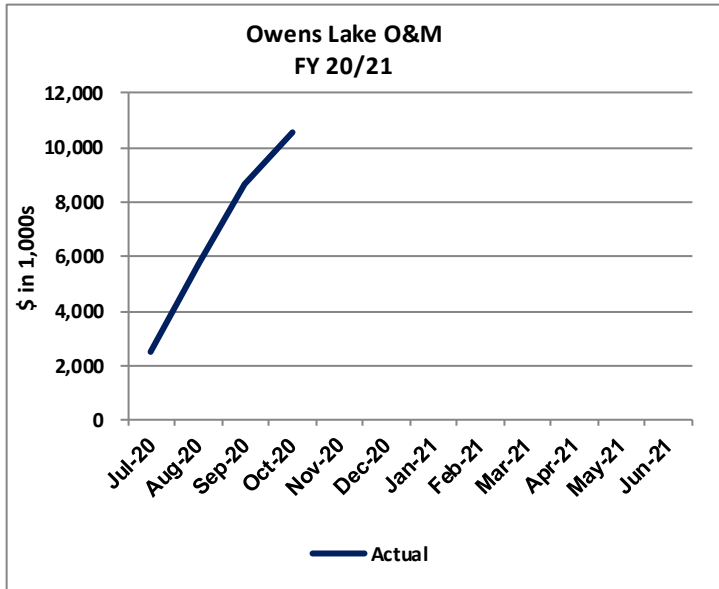
REPORTING PERIOD: October 2020

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

TARGET & ACCEPTABLE VARIANCE (FY 20/21): N/A – for information only

STATUS: **Information Only**

FYTD as of:	Actual
Jul-20	2,511
Aug-20	5,753
Sep-20	8,639
Oct-20	10,540
Nov-20	
Dec-20	
Jan-21	
Feb-21	
Mar-21	
Apr-21	
May-21	
Jun-21	



SOURCE OF DATA: Fls 3022002 and 4013006

**1. BACKGROUND / PURPOSE**

- Proper operation and maintenance of dust control facilities at Owens Lake is necessary to comply with regulatory requirements. Dust control during the dust season, which lasts from October 16<sup>th</sup> through June 30<sup>th</sup>, is a regulatory mandate to ensure air quality in the area.

sprinklers in shallow flood areas to ensure compliance at the start of the dust season.

**2. ACHIEVEMENTS / MILESTONES MET**

- Brine Maintenance – Crews completed maintenance work in the brine areas to ensure compliance at the start of dust season.
- Managed Vegetation (MV) – Crews continue monitoring vegetation areas to ensure required vegetative coverage in preparation for fall season vegetative assessment.
- Shallow Flood Maintenance – Crews completed repairs and installation of

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

- Expenditure is expected to be at budget level by fiscal year-end.

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

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



# Joint System



# LADWP RATES METRIC – Total FTEs Against Plan

RESPONSIBLE MANAGER: Shannon C. Pascual

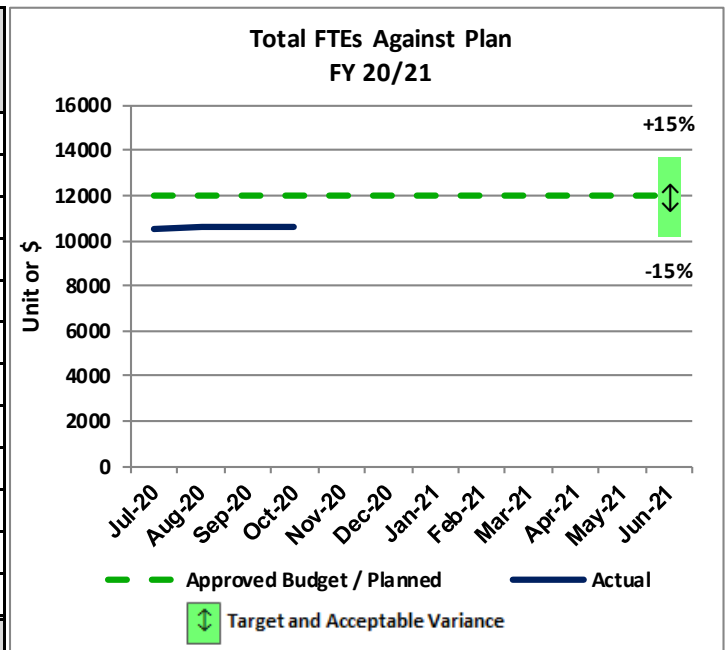
REPORTING PERIOD: October 2020

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

TARGET & ACCEPTABLE VARIANCE (FY 20/21): +/- 15%

**STATUS:** Within Acceptable Variance

FYTD as of:	Approved Budget / Planned	Actual	Variance		Re-Estimate (If Applicable)
			Unit or \$	%	
Jul-20	11,963	10,541	-1422	-11.9%	
Aug-20	11,963	10,587	-1376	-11.5%	
Sep-20	11,963	10,587	-1376	-11.5%	
Oct-20	11,963	10,580	-1383	-11.6%	
Nov-20	11,963				
Dec-20	11,963				
Jan-21	11,963				
Feb-21	11,963				
Mar-21	11,963				
Apr-21	11,963				
May-21	11,963				
Jun-21	11,963				
<b>Acceptable Variance</b>			<b>± 15%</b>		



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.

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

LADWP’s staffing level remains within the acceptable limits this month.

## 2. ACHIEVEMENTS / MILESTONES MET

- External Hires = 29
- Attrition = 29
- Net New Employees = 0

## 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 Program Management Office

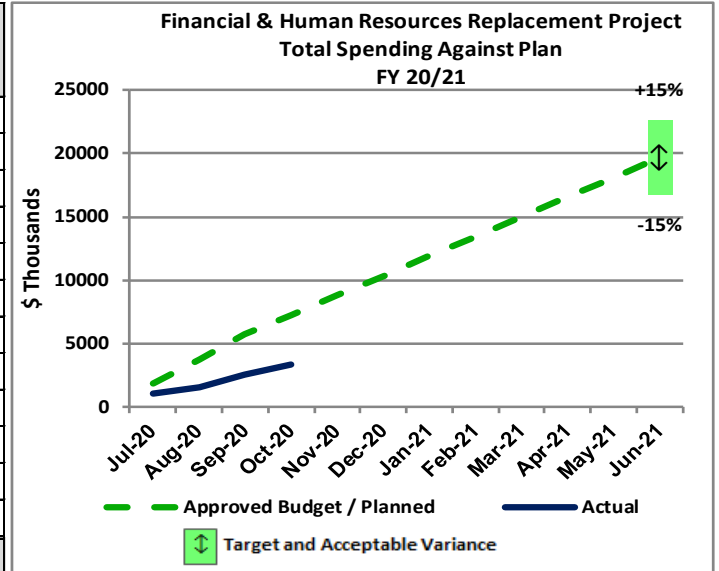
**REPORTING PERIOD:** October 2020

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

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

**STATUS:** Outside Acceptable Variance

FYTD as of:	Approved Budget / Planned	Actual	Variance		Re-Estimate (If Applicable)
			Unit or \$	%	
Jul-20	1,870.8	1,115.2	-756	-40.4%	
Aug-20	3,741.6	1,541.9	-2200	-58.8%	
Sep-20	5,720.2	2,602.3	-3118	-54.5%	
Oct-20	7,267.9	3,365.4	-3903	-53.7%	
Nov-20	8,815.6				
Dec-20	10,363.3				
Jan-21	11,911.0				
Feb-21	13,458.7				
Mar-21	15,006.4				
Apr-21	16,554.1				
May-21	18,101.8				
Jun-21	19,698.7				
<b>Acceptable Variance</b>			± 15%		



**SOURCE OF DATA:** FI 29401

**1. BACKGROUND/PURPOSE**

- This Project establishes the Department’s (Dept.) integrated Enterprise Resource Planning (ERP) Program consisting of Financial, Payroll and Human Resources Management
  - Procurement was removed from the ERP project in October 2020 due to selected ERP software (SW) limitations. Procurement will deploy the SW Ivalua and integrate it with the ERP Program
- 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 SW solutions
- To establish the ERP program, the Dept. is engaging in a two-stage procurement process:
  - Stage One (Completed): Request for Qualification for best fit SW: Workday
  - Stage Two: Piggyback of City of LA System Integrator (SI) contract with Workday

**2. ACHIEVEMENTS/MILESTONES MET**

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

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

- Project progress was temporarily delayed while the Dept. reprioritized critical projects and hired needed resources
- Stay at Home Order & Social Distancing requirements, due to COVID-19, postponed hiring and SW selection
- ERP labor expenditures were below approved budgets as hiring for additional positions is ongoing

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

- Decision to piggyback on City of LA’s SI contract, rather than put out a Request for Proposal, was made to speed up deployment of the ERP Modules due to all current modules risk of failure. Failure of any of these legacy systems will have significant impact on LADWP operations
- Continue to proceed with achieving ERP Program milestones by utilizing tools that enable remote access, such as WebEx, in lieu of face to face meetings. Use of these tools enable the project to continue and, at the same time, to stay in compliance with the Stay at Home Order and Social Distancing requirements
- Spending expected to pick up the last quarter of Fiscal Year 20/21 when the ERP project kicks-off
  - Note: Ivalua SW deployment expenses will continue to be charged to the ERP Project.

Within Acceptable Variance  Outside Acceptable Variance  Exceeds Target  Needs Attention

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

RESPONSIBLE MANAGER: Flora Chang  
Information Technology Program Management Office

REPORTING PERIOD: October 2020

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

TARGET & ACCEPTABLE VARIANCE (FY 20/21): N/A

STATUS **Information Only**

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

SOURCE OF DATA: FI 29401

## 1. BACKGROUND/PURPOSE

- This Project establishes the Department's (Dept.) integrated Enterprise Resource Planning (ERP) Program consisting of Financial, Payroll and Human Resources Management
  - Procurement was removed from the ERP project in October 2020 due to selected ERP software (SW) limitations. Procurement will deploy the SW Ivalua and integrate it with the ERP Program
- 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 SW solutions
- To establish the ERP program, the Dept. is engaging in a two-stage procurement process:
  - Stage One (Completed): Request for Qualification for best fit SW: Workday
  - Stage Two: Piggyback of City of LA System Integrator (SI) contract with Workday

## 2. ACHIEVEMENTS/MILESTONES MET

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

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

- Project progress was temporarily delayed while the Dept. reprioritized critical projects and hired needed resources
- Stay at Home Order & Social Distancing requirements, due to COVID-19, delayed all of the milestone/ deadlines by approximately three months

## 4. MITIGATION PLAN AND /OR RECOMMENDATIONS

- Decision to piggyback on the City of LA's SI contract, rather than put out a Request for Proposal, was made to speed up deployment of the ERP Modules due to all current modules risk of failure. Failure of any of these legacy Systems will have a significant impact on LADWP operations
  - The Milestone/Deadline Description chart above was updated to reflect changes due to decision to piggyback
- Continue to proceed with achieving ERP Program milestones by utilizing tools that enable remote access, such as WebEx, in lieu of face to face meetings. Use of these tools enable the project to continue 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: October 2020

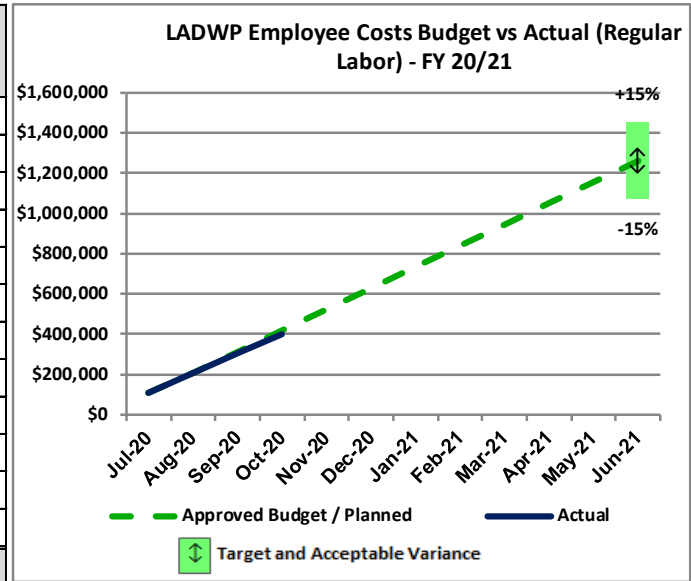
DEFINITION OF RATES METRIC: LADWP employee costs (including regular labor, overtime, pension and healthcare, excluding daily exempt and Utility Pre-Craft Trainee) budget vs. actual (\$M)

TARGET & ACCEPTABLE VARIANCE (FY 20/21): +/- 15%

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

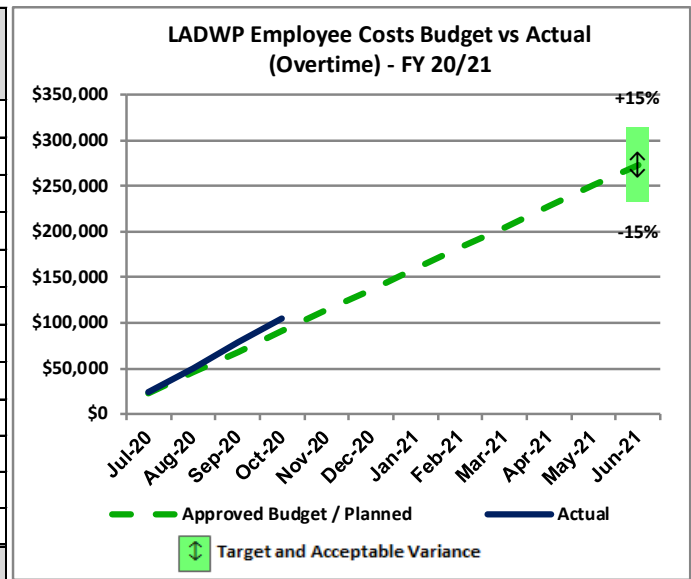
**REGULAR LABOR STATUS:** Within Acceptable Variance

FYTD as of:	Approved Budget / Planned	Actual	Variance		Re-Estimate (If Applicable)
			Unit or \$	%	
Jul-20	105,120	107,762	2,642	2.5%	
Aug-20	210,240	204,759	-5481	-2.6%	
Sep-20	315,360	307,555	-7805	-2.5%	
Oct-20	420,480	398,629	-21852	-5.2%	
Nov-20	525,600				
Dec-20	630,720				
Jan-21	735,840				
Feb-21	840,960				
Mar-21	946,080				
Apr-21	1,051,200				
May-21	1,156,320				
Jun-21	1,261,441				
<b>Acceptable Variance</b>			<b>± 15%</b>		



**OVERTIME STATUS:** Within Acceptable Variance

FYTD as of:	Approved Budget / Planned	Actual	Variance		Re-Estimate (If Applicable)
			Unit or \$	%	
Jul-20	22,787	24,408	1,621	7.1%	
Aug-20	45,574	50,213	4639	10.2%	
Sep-20	68,361	78,398	10037	14.7%	
Oct-20	91,148	104,769	13620	14.9%	
Nov-20	113,935				
Dec-20	136,722				
Jan-21	159,509				
Feb-21	182,296				
Mar-21	205,083				
Apr-21	227,870				
May-21	250,657				
Jun-21	273,444				
<b>Acceptable Variance</b>			<b>± 15%</b>		



Employee Cost Category	YTD as of October 2020				FY 20/21 Approved
	Budget	Actual	Variance	Variance %	
Regular Labor	420,480	398,629	-21,852	-5.2%	1,261,441
Overtime	91,148	104,769	13,620	14.9%	273,444
<b>Regular Labor + Overtime</b>	<b>511,628</b>	<b>503,397</b>	<b>-8,231</b>	<b>-1.6%</b>	<b>1,534,885</b>
Health Care Allocation	125,716	116,718	-8,999	-7.2%	377,148
Retirement & Death Benefit	196,564	147,762	-48,802	-24.8%	589,692
<b>Total</b>	<b>833,908</b>	<b>767,877</b>	<b>-66,031</b>	<b>-7.9%</b>	<b>2,501,725</b>

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:** October 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 20/21):** 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 October 2020:

Total Number of Water and Power Employees per Customer Meter  $10,580/2,309,416 = .0046$

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

System	Occupied
Power	5,247
Water	2,118
Joint	3,215
Total	10,580

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

	Total
Power	1,598,819
Water	710,597
Total	2,309,416

## 4. MITIGATION PLAN AND / OR RECOMMENDATIONS

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

# LADWP RATES METRIC – GHG Emissions Reduction Ratio (Joint)

RESPONSIBLE MANAGER: Mark Sedlacek, Katherine Rubin

REPORTING PERIOD: As of December 2020

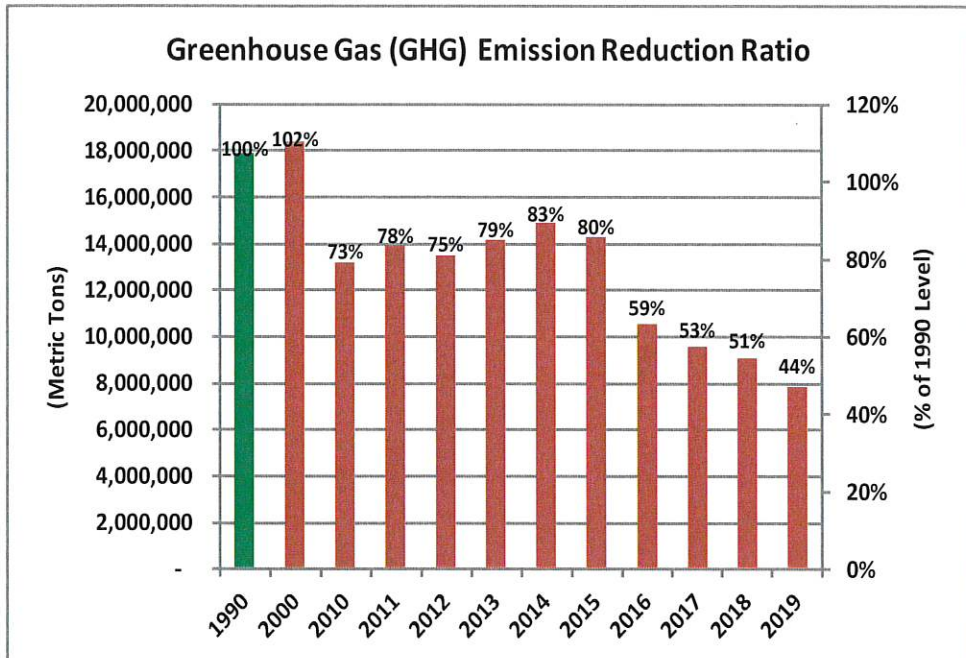
DEFINITION OF RATES METRIC: Current Year GHG Emissions /1990 GHG Emissions

TARGET & ACCEPTABLE VARIANCE (CY 2019): 47%; +5%

STATUS: Within Acceptable Variance

- CY 2019 Target: 47% of 1990 GHG Emission level
- CY 2019 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	13,165,764	73%
2011	13,900,590	78%
2012	13,519,339	75%
2013	14,174,036	79%
2014	14,911,781	83%
2015	14,312,947	80%
2016	10,566,904	59%
2017	9,554,640	53%
2018	9,060,486	51%
2019	7,884,289	44%



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

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

- No variance explanation needed.

## 3. LADWP ACHIEVEMENTS / MILESTONES

- Early divestiture of Navajo Generating Station 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 2019 included 34% renewable energy.
- LADWP's 2019 emissions are 56% below its 1990 emissions baseline.

## 4. MITIGATION PLAN AND / OR RECOMMENDATIONS

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

# LADWP RATES METRIC – Energy Savings Variance Report (Joint)

RESPONSIBLE MANAGER: David Jacot

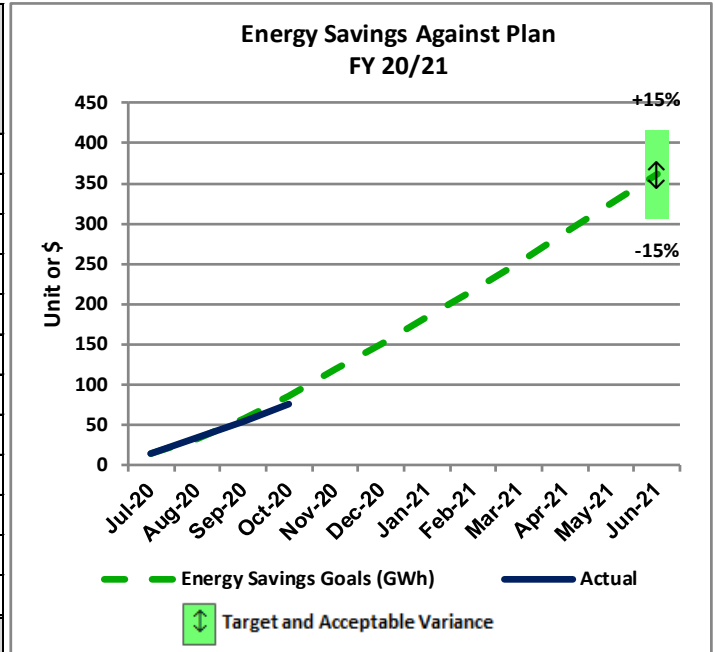
REPORTING PERIOD: October 2020

DEFINITION OF RATES METRIC: Energy Savings Against Plan

TARGET & ACCEPTABLE VARIANCE (FY 20/21): 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-20	14.4	15.2	1	4.9%	
Aug-20	32.5	35.2	3	8.4%	
Sep-20	57.7	55.2	-3	-4.4%	
Oct-20	86.6	75.8	-11	-12.5%	
Nov-20	119.1				
Dec-20	151.6				
Jan-21	184.1				
Feb-21	216.5				
Mar-21	252.6				
Apr-21	288.7				
May-21	324.8				
Jun-21	360.9				
<b>Acceptable Variance</b>			± 15%		



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

## 1. BACKGROUND / PURPOSE

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

## 2. ACHIEVEMENTS / MILESTONES MET

Despite COVID 19 and the “Safer at Home” mandate, the LAUSD Direct Install program moved forward.

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

Total energy savings as of October 2020, 11 GWh or 13% below the FYTD energy savings target because of suspended programs/activities, as a result of COVID 19 & “Safer at Home” 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” 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

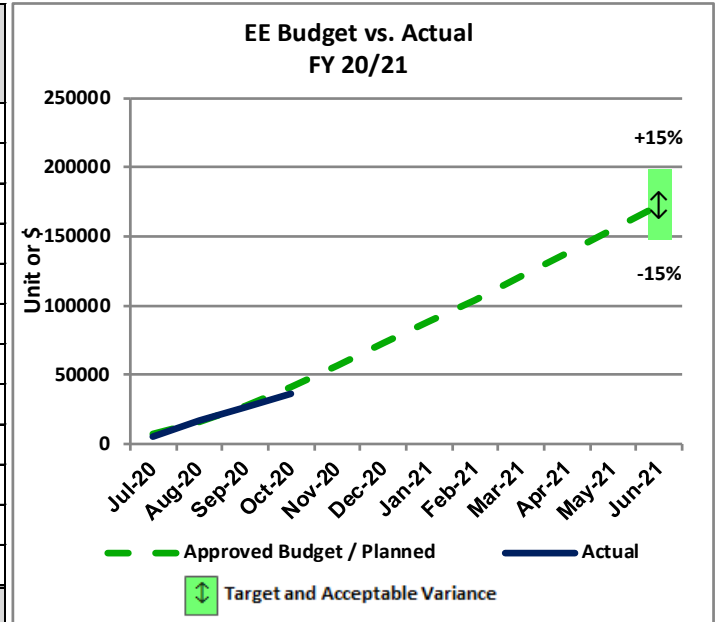
REPORTING PERIOD: October 2020

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

TARGET & ACCEPTABLE VARIANCE (FY 20/21): +/- 15%

STATUS: Within Acceptable Variance

FYTD as of:	Approved Budget / Planned	Actual	Variance		Re-Estimate (If Applicable)
			Unit or \$	%	
Jul-20	6,916	5,477	-1439	-20.8%	
Aug-20	15,561	16,753	1192	7.7%	
Sep-20	27,663	26,375	-1288	-4.7%	
Oct-20	41,495	36,019	-5476	-13.2%	
Nov-20	57,056				
Dec-20	72,616				
Jan-21	88,177				
Feb-21	103,738				
Mar-21	121,027				
Apr-21	138,317				
May-21	155,606				
Jun-21	172,896				
<b>Acceptable Variance</b>			<b>± 15%</b>		



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

## 1. BACKGROUND / PURPOSE

Efficiency Solutions’ (ES) energy savings goals are a key performance metric related to the Energy Cost Adjustment Factor, a critical power rate component. Energy Savings are compiled monthly into a Key Performance 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

Despite COVID 19 and the “Safer at Home” mandate, some energy efficiency programs continued such as the Consumer Rebate Program and LAUSD Direct Install.

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

Energy efficiency program expenditures are at \$ 36M as of October 2020, \$5.5M and 13% below the FYTD approved budget due to the suspension of some programs and activities as a result of COVID 19 and the “Safer at Home” 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” 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: October 2020

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

TARGET & ACCEPTABLE VARIANCE (FY 17/18): Annual metric: Levelized Cost \$.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 SCPA 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 -41% from the established \$0.060 target.

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

LADWP's portfolio of energy efficiency programs has historically been very cost effective, with a levelized cost of \$0.0356, well below the \$0.060 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.

**ATTACHMENT II**  
**LADWP Rates Metrics Summary**  
**2019-2020 Fiscal Year To Date**  
**(June 2020)**



## LADWP RATES METRICS SUMMARY

Related Rate Adjustment Factor	Category	#	Board Metric	Definition	FY 19/20 Target	Acceptable Variance	Responsible Manager	June 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	22.3%
	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	-9.6%
	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	9.7%
	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	6.5%
	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	-11.8%
	Renewable Portfolio Standard (Owned)	10	Total RPS cost (\$/MWh) vs. plan, by technology (Geothermal)	Total RPS purchased power cost (\$/MWh) as compared to plan, by technology (Geothermal)	Geothermal: \$80.86/MWh	+/- 15%	Jan Lukjaniec	-7.4%

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	June 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	-76.2%
	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	43.5%
		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	20.7%
	Power System Reliability Program (Transmission)	16	Cost per mile of underground circuits	Cost per mile of underground circuits	\$5.5 million	+/- 15%	Kishan Kasondra	109.1%
	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	-2.0%
		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%	Jonathan Fonti	-1.1%
	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	4.9%
		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	1.3%
	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	3.1%
		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	0.8%
		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	6.3%
		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	13.6%

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	June 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	4.4%
		26	Average unit price for critical Distribution assets (Poles)	Average unit price per pole	Pole: \$24k	+/- 15%	Walter Rodriguez	47.1%
		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	17.8%
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	-59.3%
	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	-8.3%
	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	-19.3%
	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	1.6%
	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	-58.8%
	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	26.0%
	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	-1.9%

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	June 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	-16.1%
	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	-51.2%
	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	22.4%
	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	-39.5%
	Capital Improvement Program	44	Assets replaced against plan	Feet of trunkline replaced against plan	Trunkline: 6,000 Feet	+/- 10%	Trunkline: Gregory Reed	79.0%
	Capital Improvement Program	45	Assets replaced against plan	Number of meters replaced against plan	Meters: 33,500	+/- 10%	Mainline & Meters: Breonia Lindsey/Sandy Foster	-19.5%
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	8.5%
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	-2.7%
Owens Valley Regulatory Adjustment Factor	Owens Valley	48	Budget vs. actual for Owens Lake O&M (\$M)	Board Approved Annual Budget vs. Actual expenditures	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	-6.3%
	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	-73.5%

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	June 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	-8.4%
	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	44.0%
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	-2.5%
	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	-5.8%
	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)

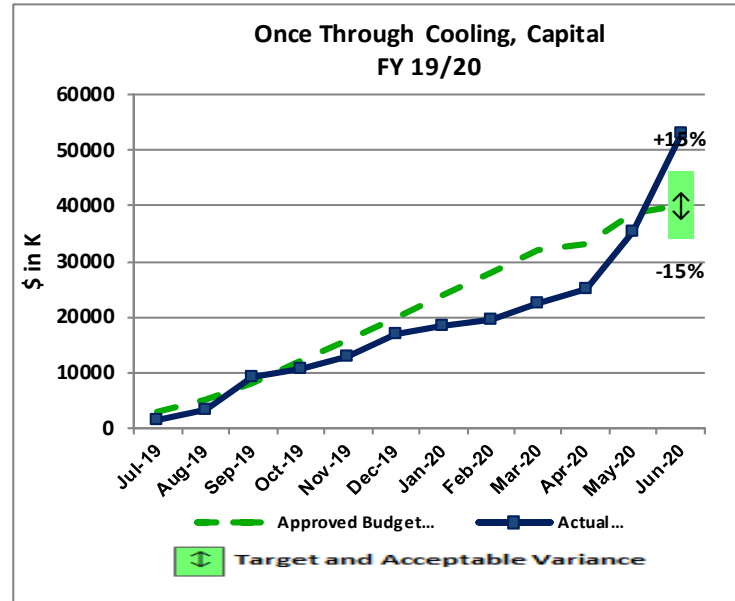
**RESPONSIBLE MANAGER:** Marcelo Di Paolo and Silvia Lozano, *Silvia Lozano* **REPORTING PERIOD:** June 2020  
 Power Planning, Development, and Engineering Division

**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	35,286.0	(3,247.8)	-8.4%	
Jun-20	40,237.3	52,897.0	12,659.7	31.5%	
<b>Acceptable Variance</b>			± 15%		
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

<b>Total Project Approved From Inception to FY27/28</b>	<b>\$2,028.0 M</b>
Projects Approved to Date	\$1,228.0
Project Actuals to Date	\$1,090.0
Total OTC Program Variance	-11.2%

**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 not to repower 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**

- Scattergood (SGS) Unit 3 Demolition – The demolition contractor, TRC Solutions Inc. (TRC) completed the sump pump system installation. (June 2020)
- HnGS Units 3 - 6 Demolition –Subcontractor Silverado began OTC infrastructure protection installation and completed the crawler crane assembly. (June 2020)
- HnGS Units 3 - 6 Demolition –Subcontractors Anheuser Electric began installing electrical conduit B&D completed constructing the step-down transformer pad at the new maintenance building. (June 2020)

- HnGS Units 3 - 6 Demolition –Subcontractor PAS completed asbestos abatement on Unit 5. (June 2020)
- SGS Unit 3 Demolition – TRC began installation of the sump pump system. (May 2020)
- HnGS Units 3 - 6 Demolition –Subcontractor Silverado completed demolition of Control Room C and the Unit 5-6 water treatment area. (May 2020)
- HnGS Units 3 - 6 Demolition – Subcontractor Silverado also began the demolition of the Unit 6 boiler. (May 2020)
- HnGS Units 3 - 6 Demolition – Subcontractor Bremco completed roof installation at the new maintenance building and began the interior build-out. (May 2020)
- HnGS Units 3 - 6 Demolition –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)

Within Acceptable Variance  Outside Acceptable Variance  Exceeds Target  Needs Attention



- 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. 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. 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.

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

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

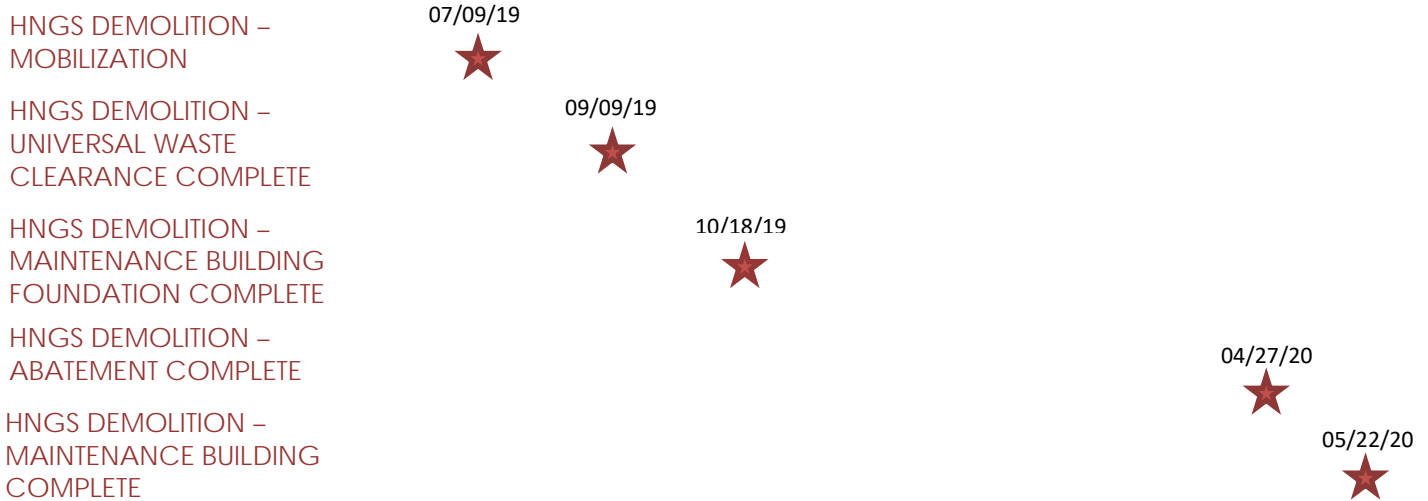
**REPORTING PERIOD:** June 2020

**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 (Unit 6)	04/27/20	04/10/20	N/A	N/A
HnGS DEMOLITION – MAINTENANCE BUILDING STRUCTURAL COMPLETE	05/22/20	06/03/20	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**

- SGS Unit 3 Demolition – The demolition contractor, TRC Solutions Inc. (TRC) completed the sump pump system installation. (June 2020)
- HnGS Units 3 - 6 Demolition –Subcontractor Silverado began OTC infrastructure protection installation and completed the crawler crane assembly. (June 2020)
- HnGS Units 3 - 6 Demolition –Subcontractors Anheuser Electric began installing electrical conduit B&D completed constructing the step-down transformer pad at the new maintenance building. (June 2020)
- HnGS Units 3 - 6 Demolition –Subcontractor PAS completed asbestos abatement on Unit 5. (June 2020)

- SGS Unit 3 Demolition – TRC began installation of the sump pump system. (May 2020)
  - HnGS Units 3 - 6 Demolition –Subcontractor Silverado completed demolition of Control Room C and the Unit 5-6 water treatment area. (May 2020)
  - HnGS Units 3 - 6 Demolition – Subcontractor Silverado also began the demolition of the Unit 6 boiler. (May 2020)
  - HnGS Units 3 - 6 Demolition – Subcontractor Bremco completed roof installation at the new maintenance building and began the interior build-out. (May 2020)
  - HnGS Units 3 - 6 Demolition –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**
- 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. Exterior maintenance building installation was complete as of May 22, 2020, and full completion is expected in late August 2020.
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)

*Nazir Fazli*

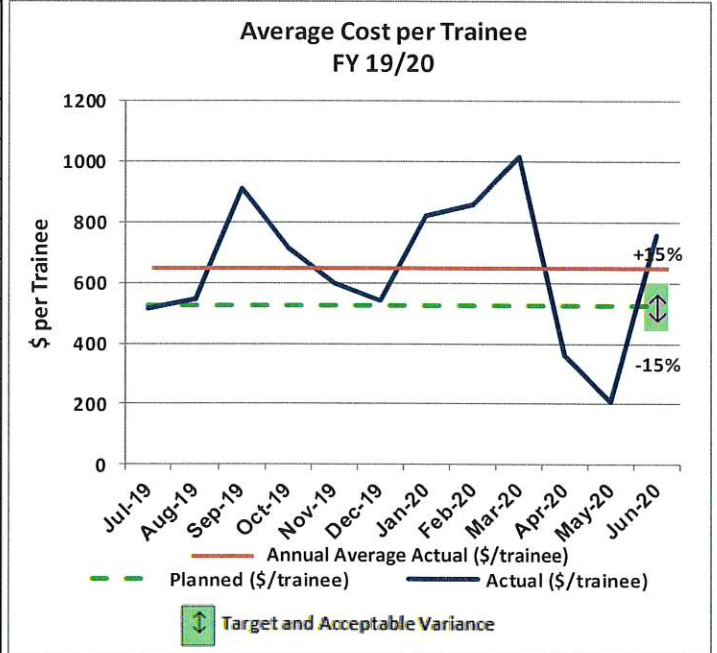
**RESPONSIBLE MANAGER:** Nazir Fazli, Power System Safety and Training (PSST)      **REPORTING PERIOD:** June 2020

**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:** Outside Acceptable Variance

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	206.3	(315.2)	-60.4%	
Jun-20	521.5	753.4	231.9	44.5%	
<b>Ann Avg</b>	<b>521.5</b>	<b>637.9</b>	<b>116.4</b>	<b>22.3%</b>	
<b>Acceptable Variance</b>			<b>± 15%</b>		



**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 higher due to increased 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 May.

- Annualized Job totals for (X7922/X7999/X7955) vary depending on the tools and materials purchased for subsequent new classes.
- The Annual Average (\$/trainee) of \$637.9K was calculated using the final figures of the related Jobs (X7922/X7999/X7955) for the entire fiscal year 19/20 with the 12 month average trainee occupancy.

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

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

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

*Nazir Fazli*

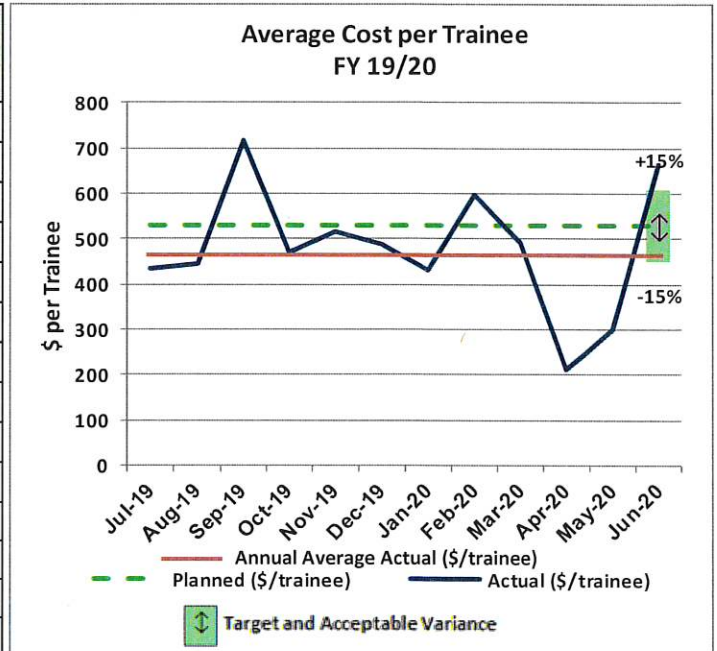
**RESPONSIBLE MANAGER:** Nazir Fazli, Power System Safety and Training (PSST)      **REPORTING PERIOD:** June 2020

**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:** Outside Acceptable Variance

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	299.2	(229.9)	-43.4%	
Jun-20	529.1	662.2	133.1	25.1%	
Ann. Avg	529.1	478.4	(50.7)	-9.6%	
Acceptable Variance			± 15%		



**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 higher this month mainly due to increased actuals in the Classroom Training for EM Trainees (Job X7923) and Manage &

Administer the PSST Organization (Job X7955) as compared to the month of May.

- Annualized Job totals for (X7923/X7926/X7955) vary depending on the tools and materials purchased for subsequent new classes.
- The Annual Average(\$/trainee) of \$478.4K was calculated using the final figures of the related Jobs (X7923/X7926/X7955) for the entire fiscal year 19/20 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.

Within Acceptable Variance     
 Outside Acceptable Variance     
 Exceeds Target     
 Needs Attention

# LADWP RATES METRIC – EDMT Graduates (Power)

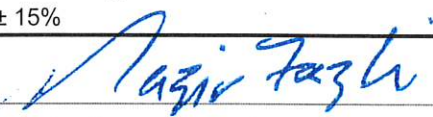
RESPONSIBLE MANAGER: Nazir Fazli, Power System Safety & Training

REPORTING PERIOD: June 2020

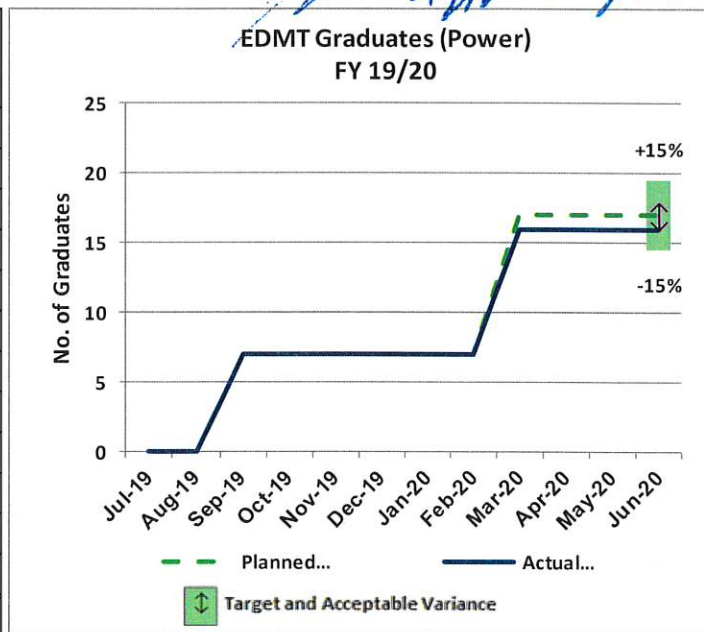
DEFINITION OF RATES METRIC: Electrical Distribution Mechanic Trainee (EDMT) Graduates Against Training Plan

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	-1	-5.9%	
Jun-20	17	16	-1	-5.9%	
<b>Acceptable Variance</b>			<b>± 15%</b>		



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

- Due to normal attrition from the Training Program, a total of 16 EDMs have graduated in the FY 19/20 instead of the planned 17.
- 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 and one of them is expected to graduate in September 2020 with a projected 14 graduates.

### 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: June 2020

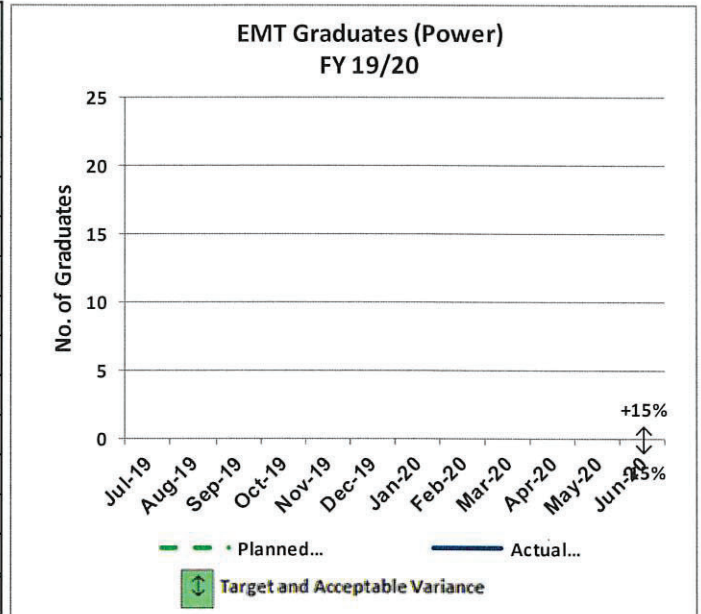
DEFINITION OF RATES METRIC: Electrical Mechanic Trainee (EMT) Graduates Against Training Plan

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

*Nazir Fazli*

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	0	0.0%	
Jun-20	0	0	0	0.0%	
<b>Acceptable Variance</b>			<b>± 15%</b>		



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 14 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)

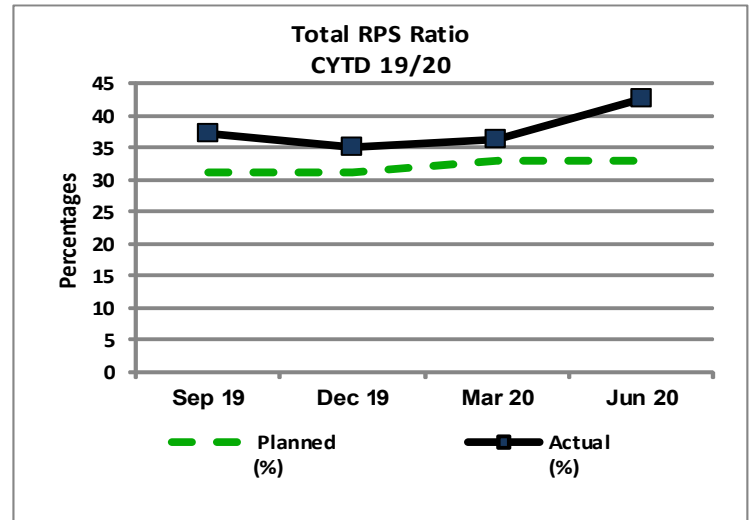
**RESPONSIBLE MANAGER:** Steven Pruett, Power External Energy Resources *SPP* **REPORTING PERIOD:** June 2020

**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 = ± 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	42.7	9.7%	
<b>Acceptable Variance</b>			- 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 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)

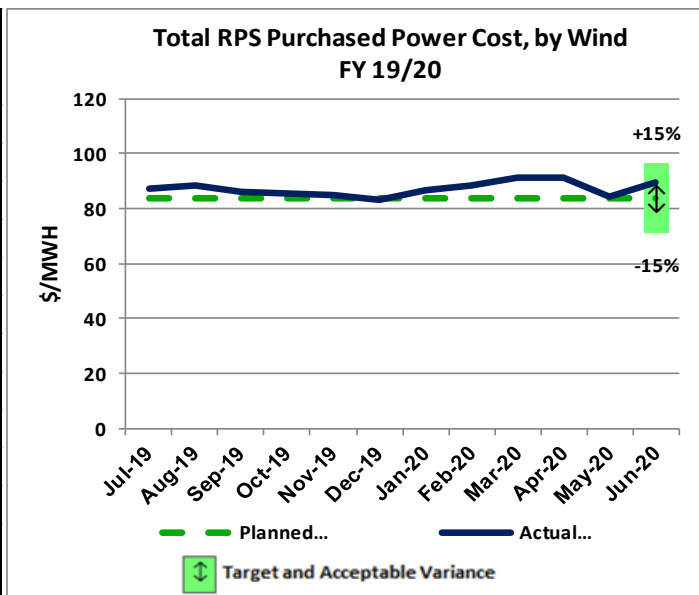
**RESPONSIBLE MANAGER:** Steven Pruet, Power External Energy Resources *SEP* **REPORTING PERIOD:** June 2020

**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	84.27	0.42	0.5%	
Jun-20	83.85	89.26	5.41	6.5%	
<b>Acceptable Variance</b>			<b>± 15%</b>		



**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)

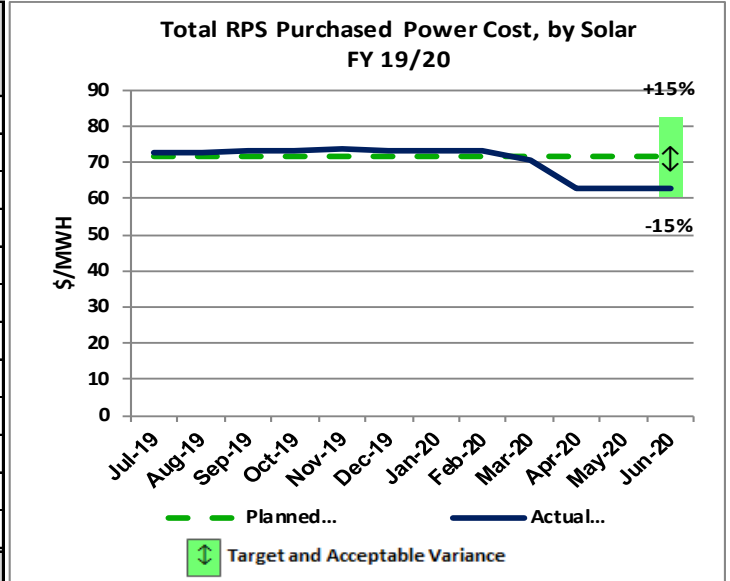
**RESPONSIBLE MANAGER:** Steven Pruet, Power External Energy Resources *SEP* **REPORTING PERIOD:** June 2020

**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	62.98	-8.45	-11.8%	
Jun-20	71.43	63.01	-8.42	-11.8%	
<b>Acceptable Variance</b>			<b>± 15%</b>		



**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)

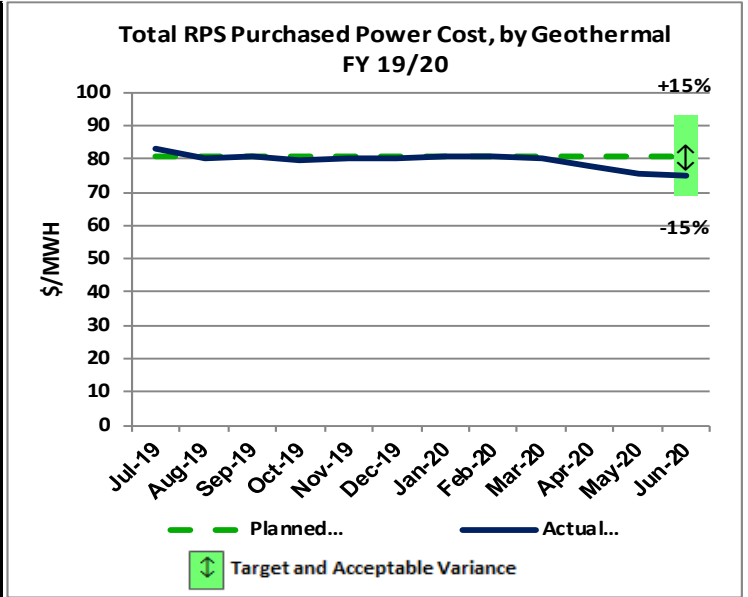
**RESPONSIBLE MANAGER:** Steven Pruet, Power External Energy Resources *SEP* **REPORTING PERIOD:** June 2020

**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	75.49	-5.37	-6.6%	
Jun-20	80.86	74.91	-5.95	-7.4%	
<b>Acceptable Variance</b>			± 15%		



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

## 1. BACKGROUND / PURPOSE

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

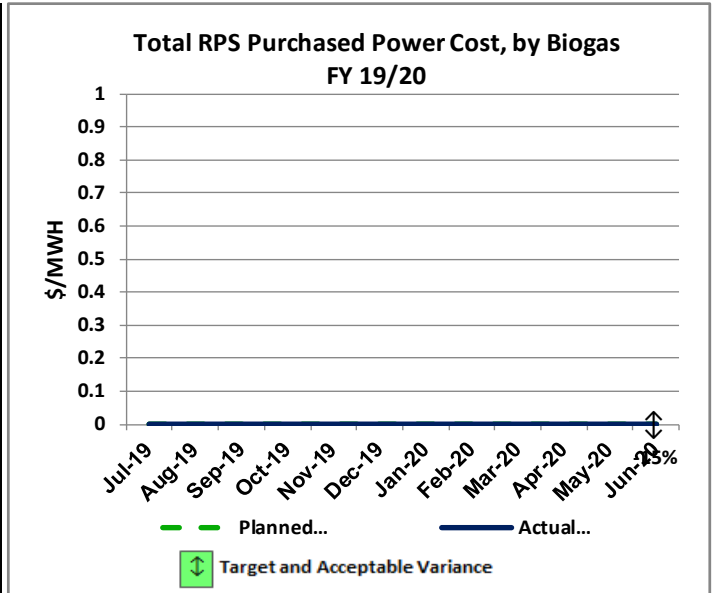
**RESPONSIBLE MANAGER:** Steven Pruet, Power External Energy Resources *SEP* **REPORTING PERIOD:** June 2020

**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	0	0	
Jun-20	0.00	0.00	0	0	
<b>Acceptable Variance</b>			± 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)

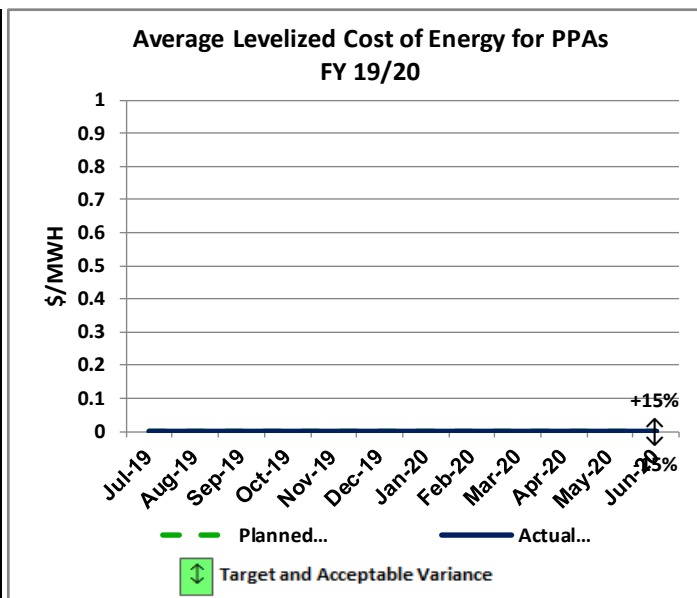
**RESPONSIBLE MANAGER:** Steven Pruett, Power External Energy Resources *S&P* **REPORTING PERIOD:** June 2020

**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	0	0	
Jun-20	0.00	0.00	0	0	
<b>Acceptable Variance</b>			± 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.

Within Acceptable Variance

Outside Acceptable Variance

Exceeds Target

Needs Attention

# LADWP RATES METRIC – Power System Reliability Program <sup>13</sup>



## Generation, Capital (Power)

RESPONSIBLE MANAGER: Robert Fick, Power Supply Operations

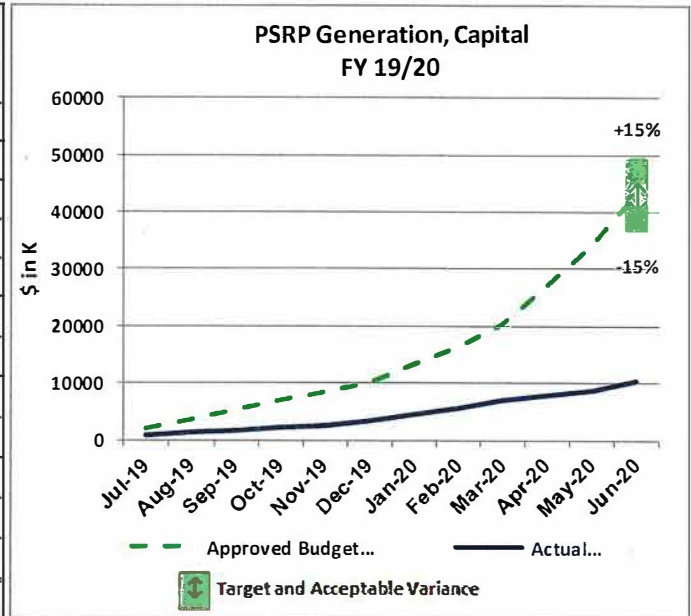
REPORTING PERIOD: June 2020

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	8,658.0	-25,506.4	-74.7%	
Jun-20	43,071.6	10,271.0	-32,800.6	-76.2%	
<b>Acceptable Variance</b>			± 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) - CPP Station Service Transformer (SST) 2 Replacement. Electrical engineering and drafting are finalizing the drawings for this project and Electrical Construction has scheduled a job walk for the Construction Estimate in July 2020. Project Percentage Complete – 32%; CPP Units 3-7 Main Bank DGA. Engineering is working on the procurement specifications and detailed design. Project Percentage Complete – 21%
- Haynes Generating Station (HnGS) - Units 11-16 Spare Main Bank Transformer. Engineering submitted the transformer procurement specifications to the Power System Specifications Office for review and the Notice of Compliance (NOC) to the Labor Relations office for review. The specifications are expected to be reviewed within two months and the NOC is expected to be reviewed within two weeks. Project Percentage Complete – 15%
- Valley Generating Station (VGS) - Unit 6 and 7 Main Bank DGA Installation. Engineering continues to work on the detailed design and is working on the procurement specifications. Project Percentage Complete – 19%
- San Fernando Power Plant (SFPP) - Main Bank 1 Replacement. Construction is on hold. Engineering is investigating options to reuse the existing location with a new pad design or to choose a new location for the transformer to be installed. Project Percentage Complete – 68%

- Harbor Generating Station (HGS) – Unit 1 major outage – 50% complete

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

- The \$32.8M 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	\$137.5M
Project Actuals to Date	\$82.9M

### 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.

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

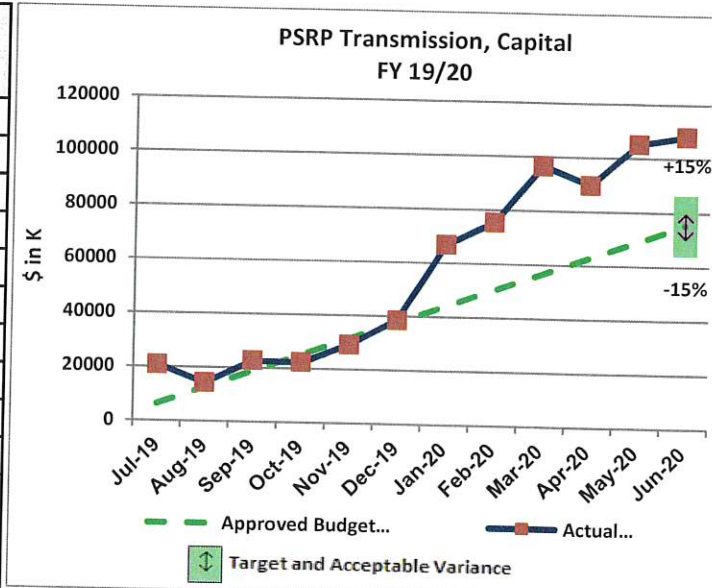
RESPONSIBLE MANAGER: John Hormozi, Power Transmission & Distribution Division *JH* REPORTING PERIOD: June 2020

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	105,029.0	36,071.1	52.3%	
Jun-20	75,226.2	107,965.0	32,738.8	43.5%	
<b>Acceptable Variance</b>			<b>± 15%</b>		



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. Since the project was accepted for service, only cleanup and punchlist work remain.

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 and \$4M in June 2020.

- 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.

Total Project Approved From Inception to FY 27/28	\$1,746.9M
Projects Approved to Date	\$1,109.8M
Project Actuals to Date	\$917.8M

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

- Review and re-estimate YTD expenditures for FI 21212 as FY 20/21 progresses, recognizing that, due to the fiscal impact of the pandemic, the FY 20/21 budget was cut to align with that approved for FY 19/20.
- 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)

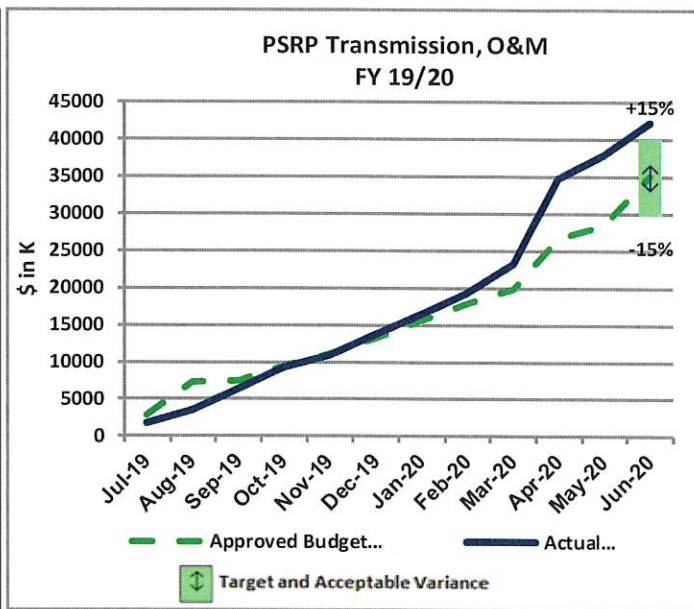
RESPONSIBLE MANAGER: Ruben Hauser, Power Transmission and Distribution      REPORTING PERIOD: June 2020

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	37,886	9,354.0	32.8%	
Jun-20	35,002	42,250	7,247.7	20.7%	
<b>Acceptable Variance</b>			± 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.

due to vegetation clearance and clean-up of homeless encampments, which affected the year end variance.

- Job B2241 was not budgeted correctly however the budget will be reestimated for program year through 2022 when the budget cycle reopens.

**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.
- Job B2241 (Transmission Assessment) 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. This job increased in costs

Within Acceptable Variance   Outside Acceptable Variance   Exceeds Target   Needs Attention



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

RESPONSIBLE MANAGER: Kishan Kasondra

REPORTING PERIOD: June 2020

Power Planning, Development, and Engineering Division

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

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

**STATUS****Outside Acceptable Variance**Kishan  
KasondraDigitally signed by Kishan  
Kasondra  
Date: 2020.09.03  
14:54:03 -0700

	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) Jan 2021 (new)	6/15/2020 (old) Mar 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 5<sup>th</sup> 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 Tarzana-Olympic Lines 1A and 1B are scheduled for replacement from October 2020 to January 2021.
- The Fairfax-Airport Line 2 cable replacement was postponed to 2021 due to the impacts of COVID-19. Therefore, during the month of June 2020, there was no construction.
- The Scattergood-Airport Line 1 is scheduled for 230-kV upgrade from March to May 2021.

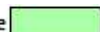
**3. PERFORMANCE / VARIANCE ANALYSIS & YEAR END PROJECTION**

	Types	Target	Actuals/ Trending Cost <sup>2</sup>	Variance (%)
FY16/17	Contract Cost	\$2.7M/mile <sup>1</sup>	\$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	\$10.3 M/mile	+109.1%
	Station Cost		\$1.2M/mile	
Cumulative Cost	Contract Cost	\$5.3M/mile <sup>3</sup>	\$4.2M/mile	-9.4%
	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



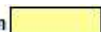
Outside Acceptable Variance



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)

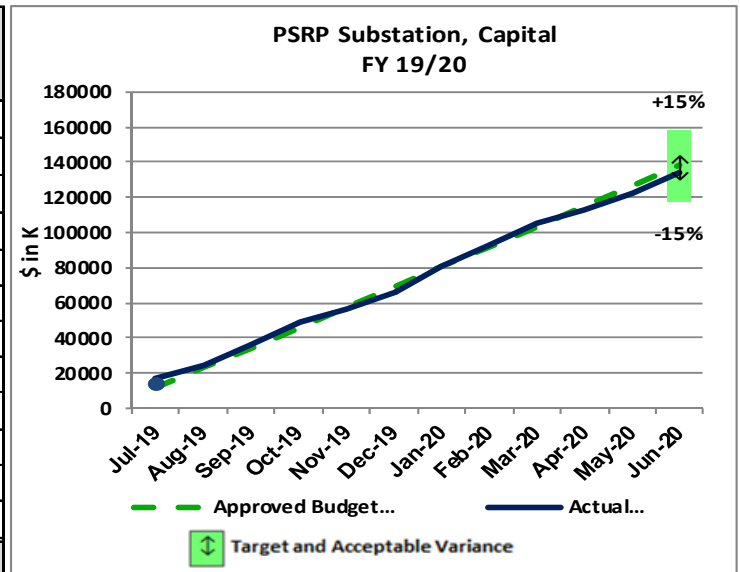
RESPONSIBLE MANAGER: Sharat Batra *Sharat Batra*  
Power Planning, Development, and Engineering Division

REPORTING PERIOD: June 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	122,763.0	-3,563.2	-2.8%	
Jun-20	137,810.4	134,996.0	-2,814.4	-2.0%	
<b>Acceptable Variance</b>			<b>± 15%</b>		



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?
	<b>TRANSFORMER REPLACEMENT:</b>				
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	2	2	No
04.01.01.77	Medium Voltage Transformers (high side below 100kV – Distributing Station - DS)	15	21	21	No
	<b>CIRCUIT BREAKER REPLACEMENT:</b>				
04.01.01.78	Transmission Circuit Breakers (>100kV - RS, SS, High Voltage Alternate Current Switchyards)	2	2	2	Yes
04.01.01.79	Sub-transmission Circuit Breakers (34.5kV - RS, DS)	5	18	18	No
04.01.01.80	Distribution Circuit Breakers (4.8kV - DS)	8	16	16	No
	<b>SUBSTATION AUTOMATED :</b>				
04.01.03.01	Distributing or Receiving Station Upgrade/Automation	7	12	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.
- In support of the 2020 Summer Resiliency Plans, the following CWPs have been issued:

Within Acceptable Variance  Outside Acceptable Variance  Exceeds Target  Needs Attention

- 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	\$1,439.2M
Project Actuals to Date	\$1,309.1M

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

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

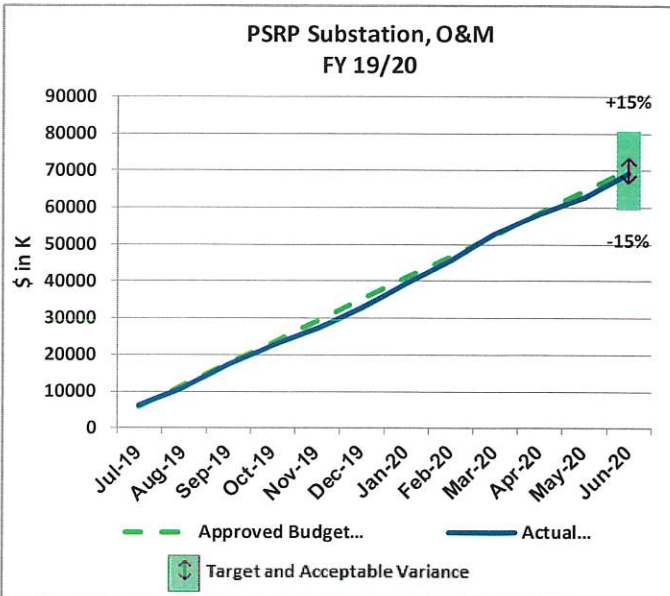
**REPORTING PERIOD:** June 2020

**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	62,628.0	-1,705.5	-2.7%	
Jun-20	70,182.0	69,442.0	-740.0	-1.1%	
<b>Acceptable Variance</b>			± 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.
- During the month of October, ESM resources were diverted from O&M work to cover the following

Within Acceptable Variance  Outside Acceptable Variance  Exceeds Target  Needs Attention

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.

- Underspending for the month of May 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%. Crews have been directed to reduce the amount of routine maintenance scheduled and performed, and to focus on equipment repairs and restoration efforts. Additionally, crews worked on the RS-U, Bank C Life Extension Project, which is a capital project.
- Underspending for the month of June continued due to impacts resulting from COVID-19 and the mitigating measures that have been taken such as Rotational Work, Modified Telecommuting, and Paid Administrative Leave. The impacts of COVID-19 have reduced our workforce in the field by approximately 50%. Crews have been directed to reduce the amount of routine maintenance scheduled and performed, and to focus on equipment repairs and restoration efforts. Additionally, crews worked on the RS-U, Bank C Life Extension Project, which is a capital project.

#### **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 

# LADWP RATES METRIC – PSRP Distribution, Capital (Power)

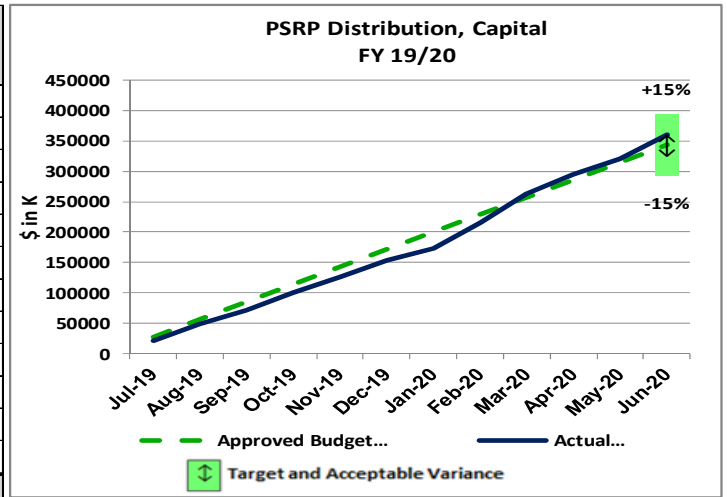
RESPONSIBLE MANAGER: Sager Farraj  
Power Planning, Development, and Engineering Division

REPORTING PERIOD: June 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	320,206.0	5,584.0	1.8%	
Jun-20	343,223.5	360,026.0	16,802.5	4.9%	
<b>Acceptable Variance</b>			<b>± 15%</b>		



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 105% of the budget through the month of June to work on and complete the following:
  - New rack & bank installation RS-Rinaldi & RS-B
  - 876 transformer installations
  - 4,033 pole replacements
  - 10,628 deteriorated crossarm replacements
  - 56.8 circuit-miles of cable replacements
  - 10,660 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 June is \$16.8M, 4.9% 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	\$2,913.4M
Project Actuals to Date	\$2,776.8M

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)

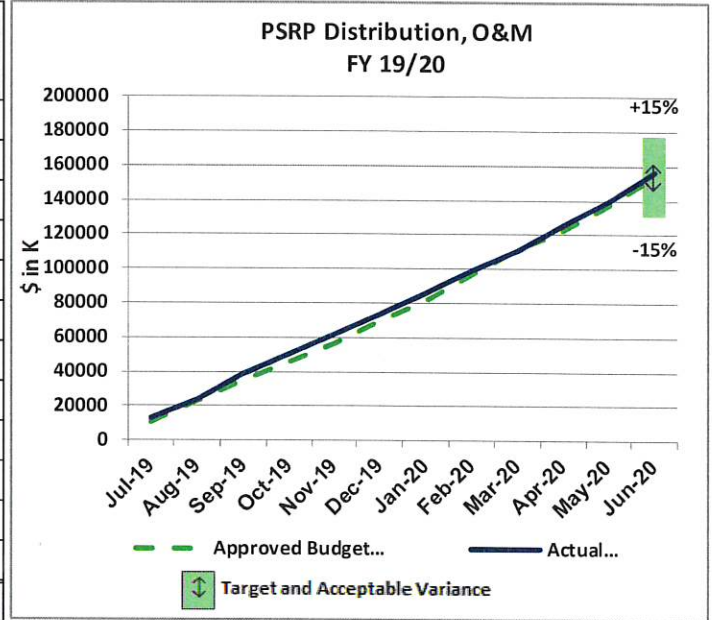
RESPONSIBLE MANAGER: Arthur Johnson, Power Transmission and Distribution REPORTING PERIOD: June 2020

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	138,929	2,308.0	1.7%	
Jun-20	154,124	156,198	2,074.3	1.3%	
<b>Acceptable Variance</b>			± 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.

## 4. MITIGATION PLAN AND / OR RECOMMENDATIONS

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



# LADWP RATES/EQUITY METRIC – Transformer Replacement (Power)

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

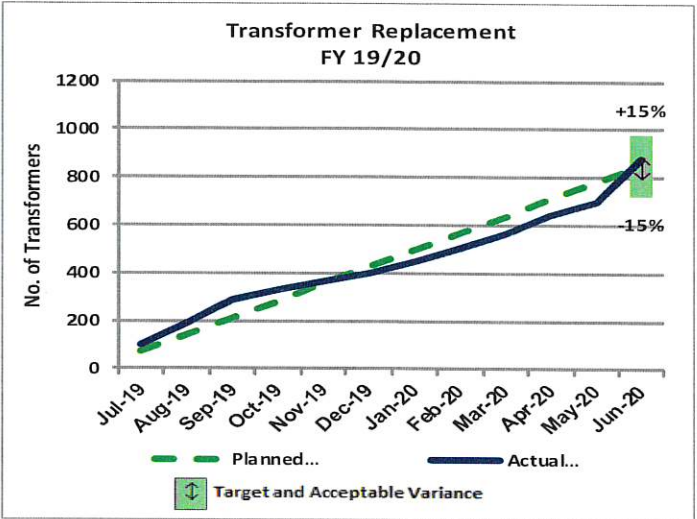
REPORTING PERIOD: June 2020

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	700	-79	-10.7%	
Jun-20	850	876	26	3.1%	
<b>Acceptable Variance</b>			<b>± 15%</b>		



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 850 transformers and the current actual number of transformers replaced is 876.

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

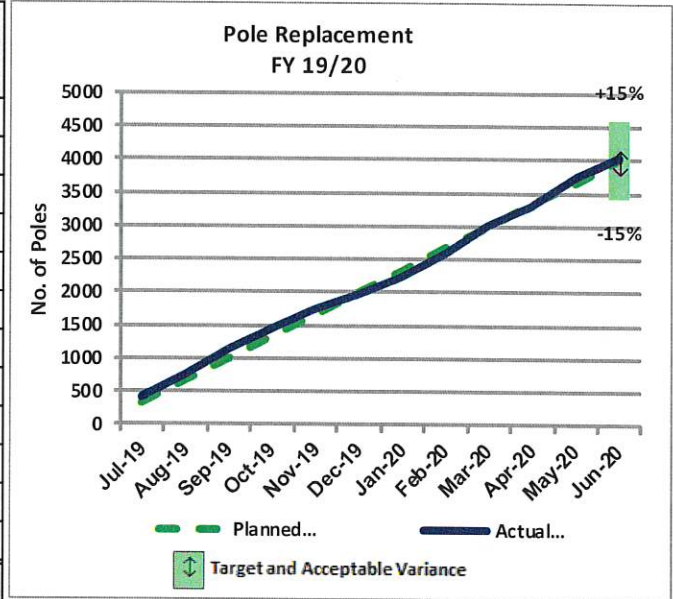
REPORTING PERIOD: June 2020

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	3,748	82	2.2%	
Jun-20	4,000	4,033	33	0.8%	
<b>Acceptable Variance</b>			<b>± 15%</b>		



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).

**2. CRITERIA**

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

**3. ACHIEVEMENTS / MILESTONES MET**

- To date, the target was to replace 4,000 poles and the current actual number of poles replaced is 4,033.

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

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

# LADWP RATES METRIC – Crossarm Replacement (Power)

RESPONSIBLE MANAGER: Arthur Johnson, Power Transmission and Distribution

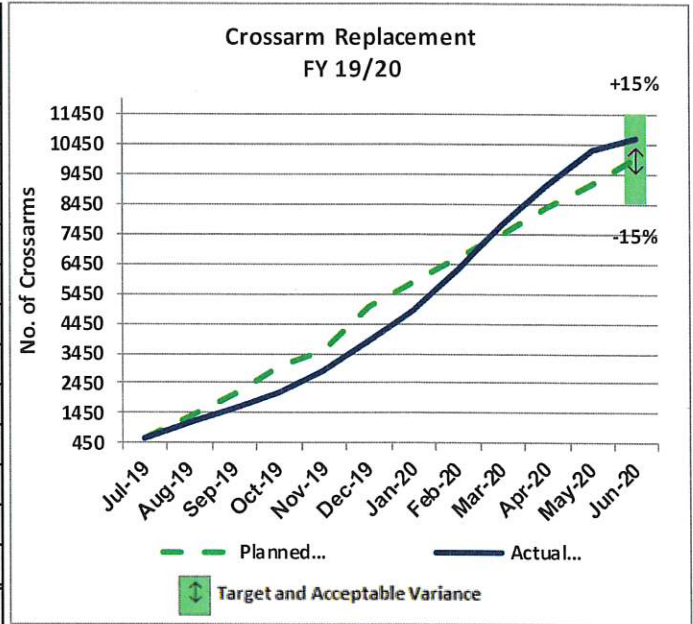
REPORTING PERIOD: June 2020

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	10,271	1,151	12.6%	
Jun-20	10,000	10,628	628	6.3%	
<b>Acceptable Variance</b>			<b>± 15%</b>		



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 10,000 crossarms and the current actual number of crossarms replaced is 10,628.

## 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.

# LADWP RATES/EQUITY METRIC – Cable Replacement (Power)

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

REPORTING PERIOD: June 2020

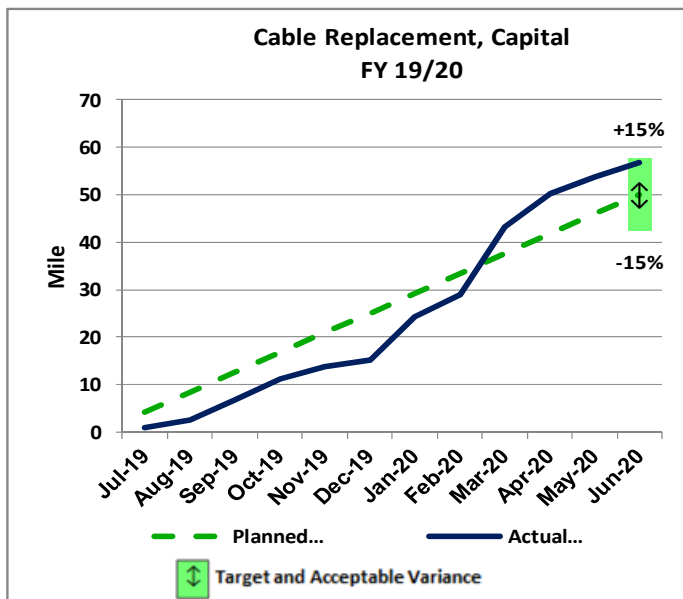
EQUITY CORE CATEGORY: Water & Power Infrastructure Investment

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: **Within Acceptable Variance**

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	53.7	7.7	16.7%	
Jun-20	50.0	56.8	6.8	13.6%	
Acceptable Variance			± 15%		



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

## 1. NARRATIVE / BACKGROUND

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

## 2. CRITERIA

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

## 3. ACHIEVEMENTS

- Through the month of June, Distribution Construction & Maintenance completed 56.8 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 June is 6.8 circuit-miles, 14% within acceptable variance. This is due to District crews closing the completed jobs in the system.

## 5. MITIGATION/RECOMMENDATION

- Met the key performance goal for Fiscal Year 19/20.

## 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

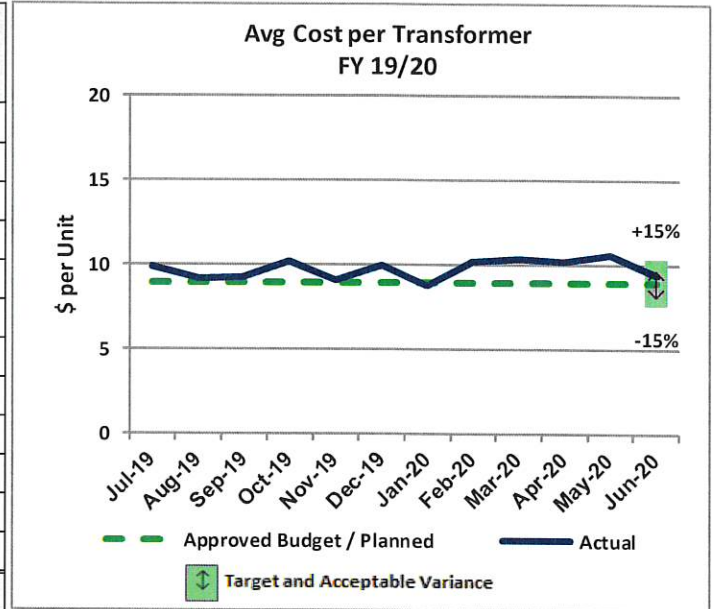
REPORTING PERIOD: June 2020

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	10.6	1.6	17.8%	
Jun-20	9.0	9.4	0.4	4.4%	
<b>Acceptable Variance</b>			<b>± 15%</b>		



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 June 30, the target was to replace 850 transformers at 100% of the FY goal. PTD has completed replacement of 876 transformers, which is 103% of the fiscal year goal with a current average cost of \$9.4 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

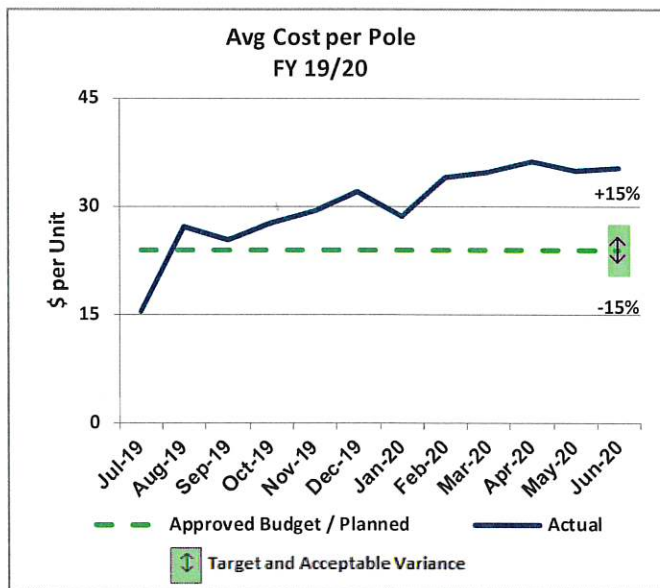
REPORTING PERIOD: June 2020

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	35	11.0	45.8%	
Jun-20	24.0	35.3	11.3	47.1%	
<b>Acceptable Variance</b>			± 15%		



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 June 30, our current to date target was a replacement of 4,000 power poles at 100% of the FY goal. PTD has completed replacement of 4,033 power poles, which is 101% of the FY goal with a current average cost of \$35.3K per unit.

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

- PTD and Contract Operations personnel are outside the acceptable variance for this month; the monthly goal has been surpassed, we exceeded the number of 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 47.1% 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. The higher cost in the per pole replacement at the end of the year is attributed to the concentration on replacing poles in high fire threat areas prior to the start of fire season. Replacing poles in these areas require more equipment, more personnel, and take significantly longer than poles replaced on the street.

Within Acceptable Variance
Outside Acceptable Variance
Exceeds Target
Needs Attention

**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.

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

RESPONSIBLE MANAGER: Walter Rodriguez, Power Transmission and Distribution

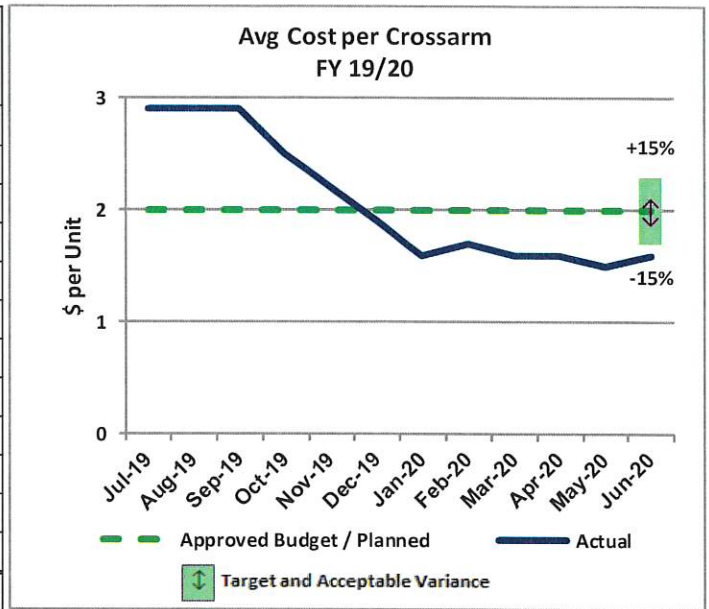
REPORTING PERIOD: June 2020

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	1.5	(0.5)	-25.0%	
Jun-20	2.0	1.6	(0.4)	-20.0%	
<b>Acceptable Variance</b>			± 15%		



SOURCE OF DATA: Jobs P6318 (KPI # 04.01.01.73)

**1. BACKGROUND / PURPOSE**

- Replace 10,000 deteriorated crossarms due to age or other damage. 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.

cost is \$1.6K, which is 20% under the target. Crossarm replacement costs will fluctuate depending on the difficulty factor of the crossarm replacement. Contributing factors can be conductor size, whether or not equipment is installed on crossarm, if conductor terminates on crossarm or if crossarm has conductor carrying more than one voltage.

**2. ACHIEVEMENTS / MILESTONES MET**

- As of June 30, our current to date target was to replace 10,000 crossarms which is 100% of the FY goal. PTD has completed the replacement of 10,628 crossarms, which is 106% 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 exceeded the acceptable variance of \$2.0K per unit. For the month of June, the average

Within Acceptable Variance  Outside Acceptable Variance  Exceeds Target  Needs Attention



*Walter R. Rodriguez*  
**LADWP RATES METRIC – Average Unit Cost per Mile of Cable (Power)**

RESPONSIBLE MANAGER: Walter Rodriguez, Power Transmission and Distribution

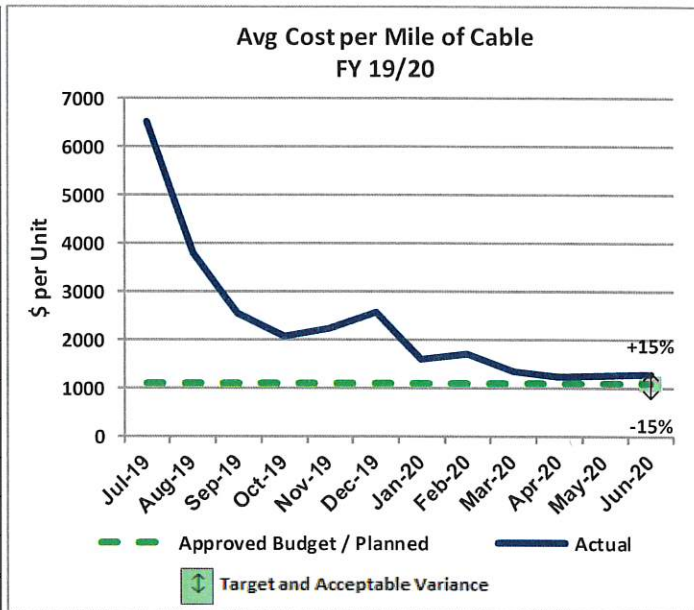
REPORTING PERIOD: June 2020

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:** Outside 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	1270.8	170.8	15.5%	
Jun-20	1100.0	1295.7	195.7	17.8%	
<b>Acceptable Variance</b>			± 15%		



SOURCE OF DATA: Jobs P6306 (KPI # 04.01.01.74)

**1. BACKGROUND / PURPOSE**

- Replace 50 miles of 4.8KV and 34.5KV underground (4.8-kV and 34.5-kV) distribution cables that require periodic upgrading because of load growth, failures due to storm damage, accidents, inherent defects, deterioration, age or advancements in materials and in power distribution techniques. Power Transmission and Distribution (PTD) has a target replacement cost of \$1100.0K per mile.

- 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.

**2. ACHIEVEMENTS / MILESTONES MET**

- PTD's annual target is replacement of 50 miles of cable. The actual cable replacement accounted for in June totals 57 miles.

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

- Average cost per mile of cable is 1295.7 which is outside the acceptable target for the month of June.
- 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.

**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.

Within Acceptable Variance   Outside Acceptable Variance   Exceeds Target   Needs Attention

# **Water System**



# LADWP RATES METRIC – NEW DISTRIBUTION INFRASTRUCTURE CREWS (WATER)

RESPONSIBLE MANAGER: Breonia Lindsey/Sandra Foster

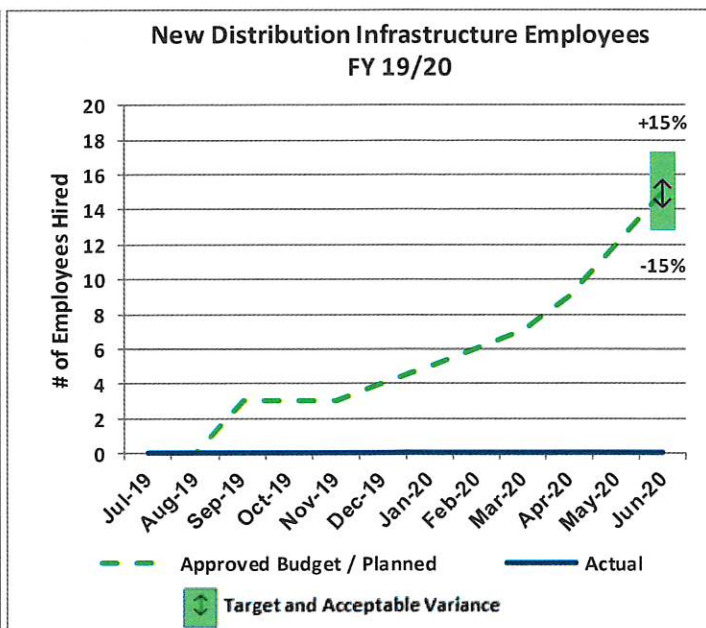
REPORTING PERIOD: June 2020

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

TARGET &amp; 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	-12	-100.0%	
Jun-20	15	0	-15	-100.0%	
Acceptable Variance			± 15%		



SOURCE OF DATA: Hiring Plan/Annual Personnel Resolution

## 1. BACKGROUND / PURPOSE

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

\*The target is two crews totaling 15 employees dedicated for infrastructure replacement.

## 2. ACHIEVEMENTS/MILESTONES MET

- The Division hired 95 infrastructure employees in fiscal year 2019/2020 filling existing vacancies in the infrastructure crews. This fiscal year the Division has been unable to net any new employees due to attrition and internal promotions. As hiring resumed in May, 2020, the Division continues to backfill critical infrastructure positions.

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

- Current rate of hiring new positions is outside the acceptable variance. The Division did not meet the 2019/2020 goal. Due to the Covid-19 pandemic hiring was suspended on March 16, 2020. The Division resumed hiring in May, 2020; 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.

## 4. MITIGATION PLAN AND/OR RECOMMENDATIONS

- The Division will ramp up its hiring efforts to meet its future mainline replacement goals in the next fiscal year.

Within Acceptable Variance



Outside Acceptable Variance



Exceeds Target



Needs Attention



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

RESPONSIBLE MANAGER: April Thang

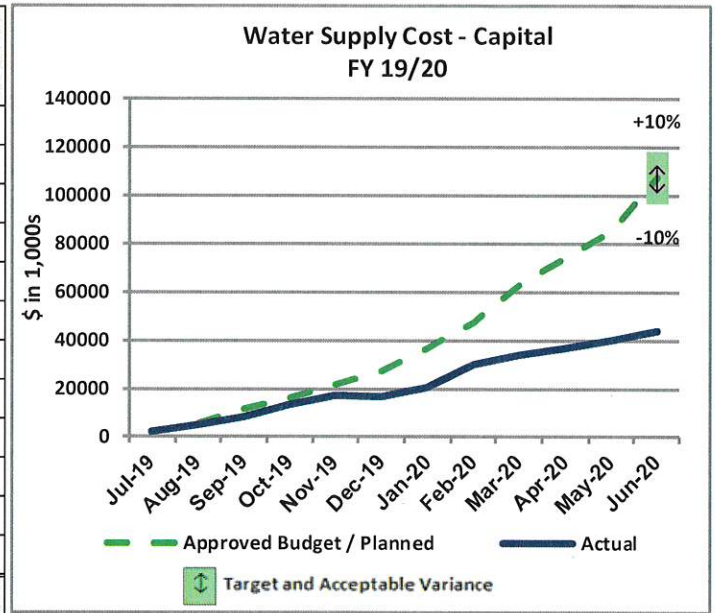
REPORTING PERIOD: June 2020

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	40,231	-44,661	-52.6%	
Jun-20	107,356	43,711	-63,645	-59.3%	
<b>Acceptable Variance</b>			<b>± 10%</b>		



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.
- In June 2020, executed amendment to agreement with LASAN to construct an equalization tank to increase the recycled water supply for the Los Angeles Groundwater Replenishment Project by approximately 3,000 AFY.
- 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 was delayed due to reduction in staff on rotation assignments due to COVID-19.

### **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 Harbor Industrial Customer On-Site Project has been delayed due to an agreement with Valero not being executed as previously planned.

### **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 *de*

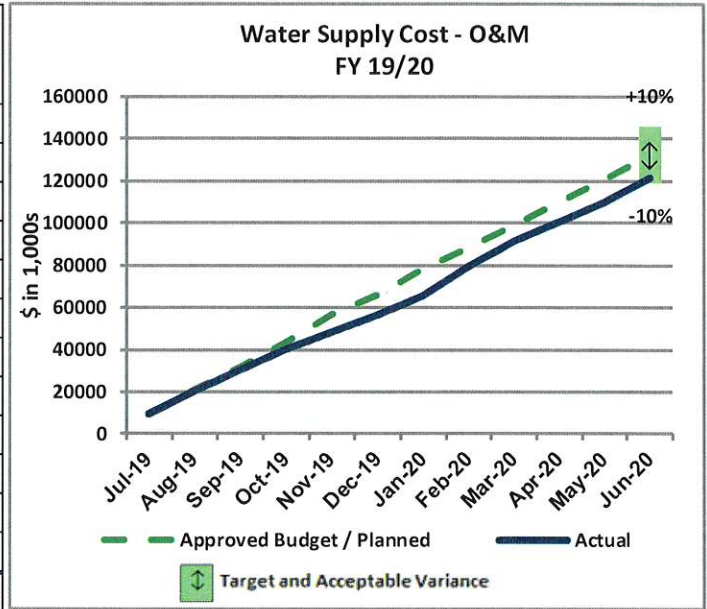
REPORTING PERIOD: June 2020

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	0.0%	
Aug-19	21,189	20,350	-839	-4.0%	
Sep-19	32,053	30,269	-1,784	-5.6%	
Oct-19	42,923	40,015	-2,908	-6.8%	
Nov-19	56,763	48,227	-8,536	-15.0%	
Dec-19	66,289	56,777	-9,512	-14.3%	
Jan-20	77,967	65,595	-12,372	-15.9%	
Feb-20	88,537	79,694	-8,843	-10.0%	
Mar-20	99,237	91,507	-7,730	-7.8%	
Apr-20	109,937	100,373	-9,564	-8.7%	
May-20	120,637	110,353	-10,284	-8.5%	
Jun-20	132,552	121,501	-11,051	-8.3%	
<b>Acceptable Variance</b>			<b>± 10%</b>		



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 400 preventative maintenance tasks for 96 pump station facilities and 821 regulatory bi-weekly maintenance on 45 emergency backup IC Engine units located throughout the Water System.
- There have been nine 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 

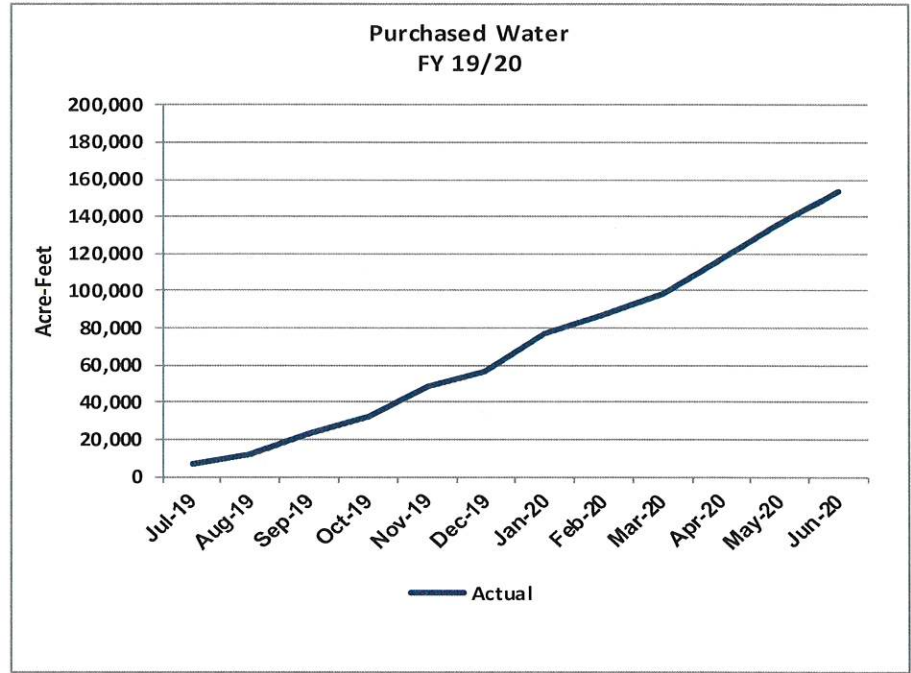
REPORTING PERIOD: June 2020

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	135,847
Jun-20	153,547



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: June 2020

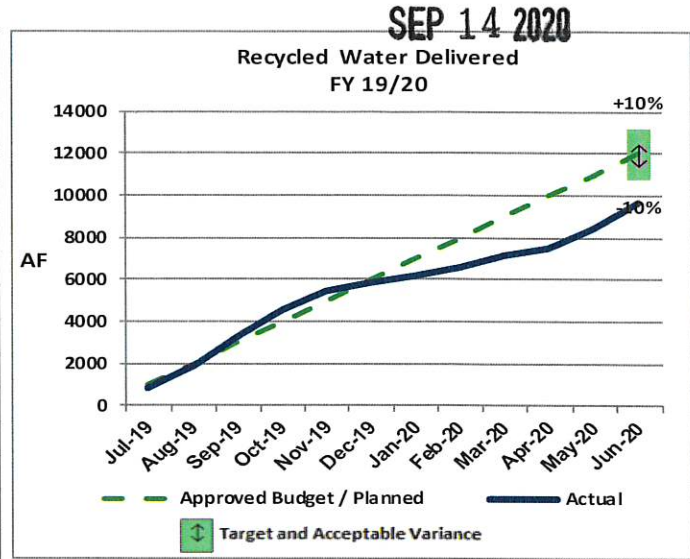
DEFINITION OF RATES METRIC: Annual quantity of recycled water delivered in acre-feet (AF) against plan.

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	4,532 *	532	13.3%	
Nov-19	5,000	5,434 *	434	8.7%	
Dec-19	6,000	5,900 *	-100	-1.7%	
Jan-20	7,000	6,191 *	-809	-11.6%	
Feb-20	8,000	6,561 *	-1439	-18.0%	
Mar-20	9,000	7,183 *	-1817	-20.2%	
Apr-20	10,000	7,489 *	-2511	-25.1%	
May-20	11,000	8,468	-2532	-23.0%	
Jun-20	12,000	9,682	-2318	-19.3%	
<b>Acceptable Variance</b>			<b>± 10%</b>		



SOURCE OF DATA: Customer Recycled Water Meter Reads

\* Monthly actual data from Oct-19 through April-20 was revised to reflect actual usage

## 1. BACKGROUND / PURPOSE

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

## 2. ACHIEVEMENTS / MILESTONES MET

- Delivered 9,682 AF of recycled water, which is approximately 19.3% 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, April, and May.

## 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]*

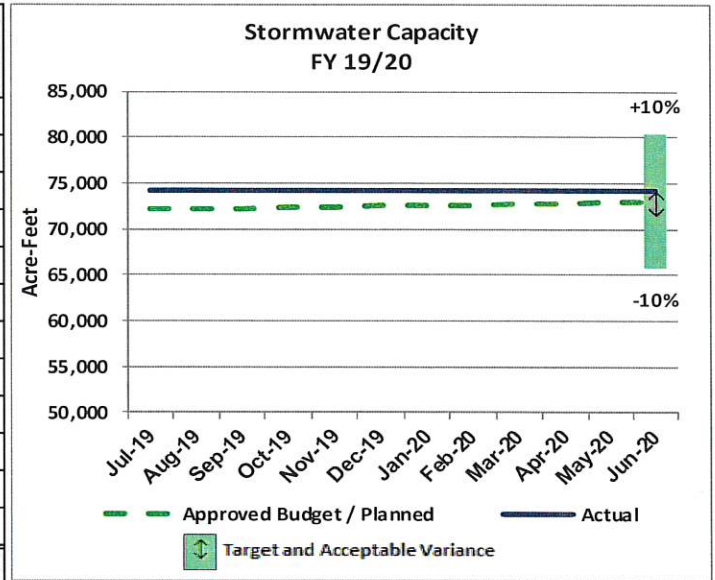
REPORTING PERIOD: June 2020

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	74,179	1,255	1.7%	
Jun-20	73,000	74,179	1,179	1.6%	
<b>Acceptable Variance</b>			<b>± 10%</b>		



SOURCE OF DATA: Summary of Major Stormwater Capture Projects Report

## 1. BACKGROUND / PURPOSE

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

- Completed projects include:
  - Lankershim Boulevard Great Street Rain Gardens (1.7 AFY).
- Projects in construction include:
  - Tujunga Spreading Grounds (8,000 AFY) is 82% complete.
  - Bradley Green Alley (6 AFY) is 95% complete.
- Projects in Design/Planning include:
  - Lankershim Boulevard Great Street Dry Wells (49.3 AFY) 60% design in progress.

- 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), 60% 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 late-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

## *Water* CENTRAL BASIN (Water)

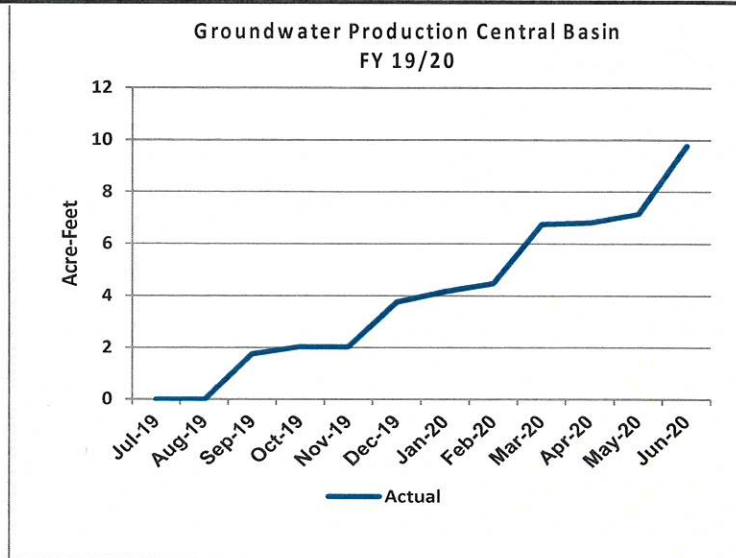
RESPONSIBLE MANAGER: Evelyn Cortez-Davis

REPORTING PERIOD: June 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.

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	7.14
Jun-20	9.76



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.

### 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 99<sup>th</sup> St Well Field was turned off on May 16, 2016 due to water quality issues related to elevated levels of naturally occurring iron and manganese in the Watts and Green Meadows areas. The discoloration issue has been closed. However, the wells will remain off line until the new chloramination station and new iron/manganese filtration removal systems are constructed.

### 3. MITIGATION PLAN AND / OR RECOMMENDATIONS

- The project to construct iron/manganese filtration removal systems for the 99<sup>th</sup> 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.

# LADWP RATES METRIC – ANNUAL GROUNDWATER PRODUCTION



## SAN FERNANDO (Water)

RESPONSIBLE MANAGER: Evelyn Cortez-Davis

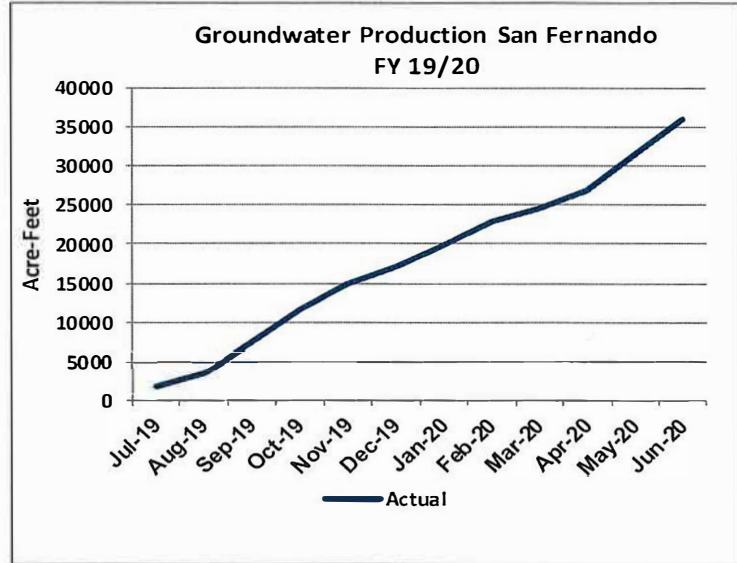
REPORTING PERIOD: June 2020

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	31,610
Jun-20	35,947



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.

Aqueduct water and can be stored for future use.

### 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.
- The groundwater extraction in the San Fernando Basin has increased from Calendar Year (CY) 2019 production. The reason for this is a combination of system demands and lesser water deliveries to the City from our Aqueduct system in CY 2020.

### 3. MITIGATION PLAN AND / OR RECOMMENDATIONS

- Local groundwater water is used conjunctively with lower cost Los Angeles

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

RESPONSIBLE MANAGER: Darin Willey *Darin Willey*

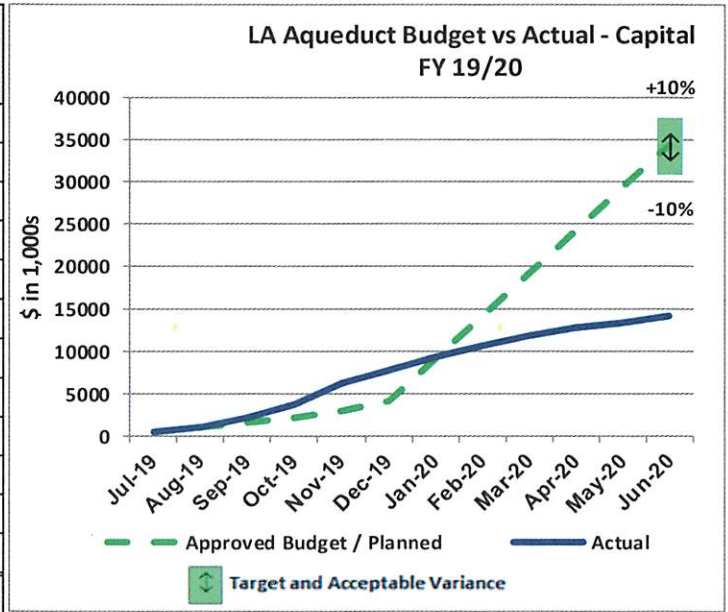
REPORTING PERIOD: June 2020

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	13,340	-15833	-54.3%	
Jun-20	34,176	14,079	-20097	-58.8%	
<b>Acceptable Variance</b>			<b>± 10%</b>		



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 2<sup>nd</sup> Los Angeles Aqueduct and State Water Project Intertie budget were deferred.
- COVID-19 has severely hampered efforts to complete capital projects where crews work closely together.
- Capital was below budget by approximately \$20 million at fiscal year-end due to delayed work on Capital Projects.

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

- The underrun in Capital was offset by an overrun in O&M expenditures.

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

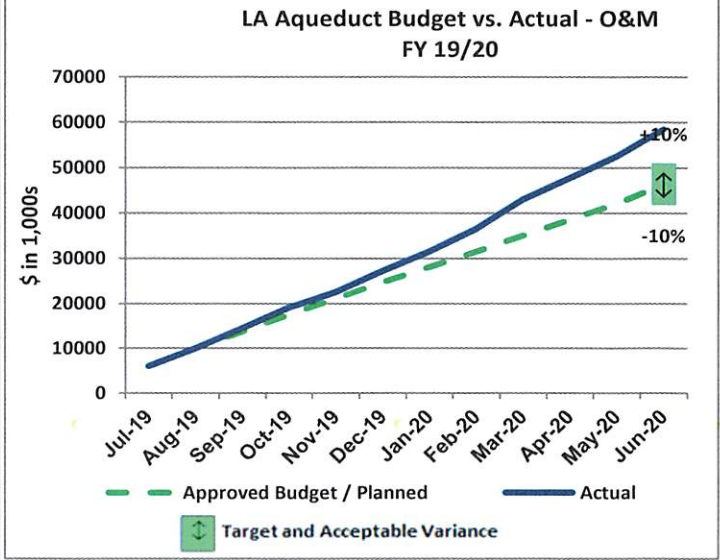
RESPONSIBLE MANAGER: Darin Willey *Darin Willey*

REPORTING PERIOD: June 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	1474	7.0%	
Dec-19	24,654	27,197	2543	10.3%	
Jan-20	27,999	31,453	3454	12.3%	
Feb-20	31,404	36,511	5107	16.3%	
Mar-20	34,939	42,948	8009	22.9%	
Apr-20	38,474	47,680	9206	23.9%	
May-20	42,009	52,529	10520	25.0%	
Jun-20	46,341	58,408	12067	26.0%	
Acceptable Variance			± 10%		



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

### 1. BACKGROUND / PURPOSE

- The Los Angeles Aqueduct is an important source of non-purchased water. During times of high flow in the Aqueduct (as per the first two months of the year), operations and maintenance focus is to manage the run-off.

### 2. ACHIEVEMENTS / MILESTONES MET

- 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 were 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 2<sup>nd</sup> half of the fiscal year, however, COVID-19 has severely hampered efforts to complete Capital projects where crews work closely together. O&M was above budget by approximately \$12 million.

### 4. MITIGATION PLAN AND / OR RECOMMENDATIONS

- The overrun in O&M was offset by an underrun in Capital expenditures.

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

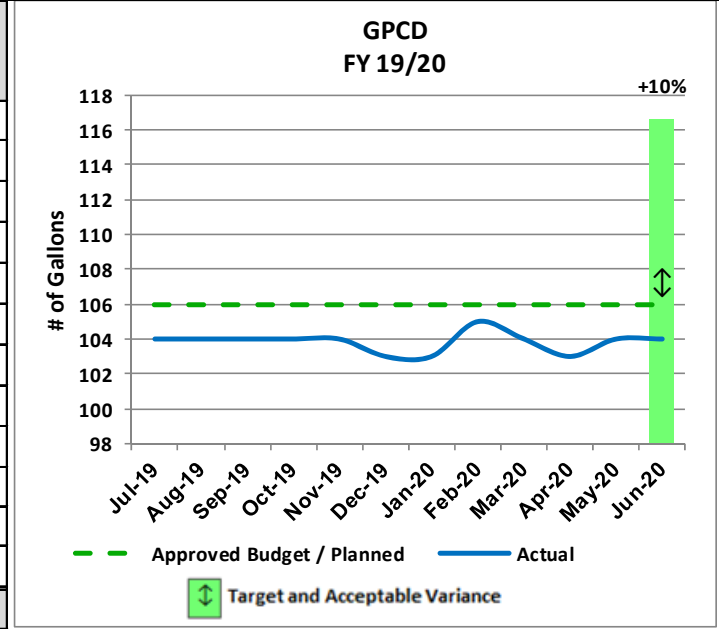
**RESPONSIBLE MANAGER:** Terrence McCarthy

**REPORTING PERIOD:** June 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	104	-2	-1.9%	
Jun-20	106	104	-2	-1.9%	
<b>Acceptable Variance</b>			<b>± 10%</b>		



**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.

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

- Customer water per capita use has remained steady with temperatures slightly above average and below average precipitation.
- The effects of COVID-19 has caused many businesses to limit their normal operations 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.

## 4. MITIGATION PLAN AND / OR RECOMMENDATIONS

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

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

RESPONSIBLE MANAGER: April Thang

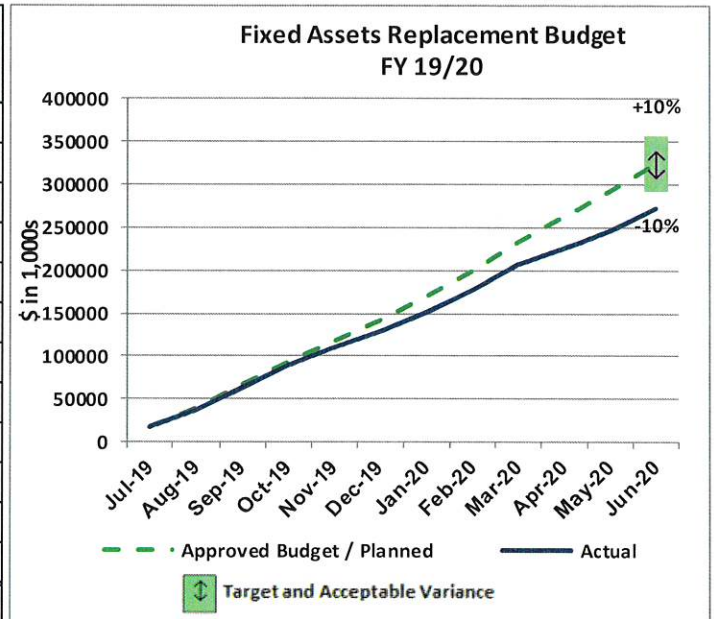
REPORTING PERIOD: June 2020

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

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

**STATUS:** Outside Acceptable Variance

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	245,453	-46,485	-15.9%	
Jun-20	324,433	272,234	-52,199	-16.1%	
<b>Acceptable Variance</b>			<b>± 10%</b>		



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 June 2020, installed 140,450 feet of mainline.
- As of June 2020, installed 4,595 feet of the open trench portion of the 54-inch diameter steel pipe, Foothill TL Unit 3 Phase I and 3,977 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 was completed in June 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 the Street Damage Restoration Fees (SDRF) are less than originally anticipated.

Within Acceptable Variance  Outside Acceptable Variance  Exceeds Target  Needs Attention



- 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: June 2020

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

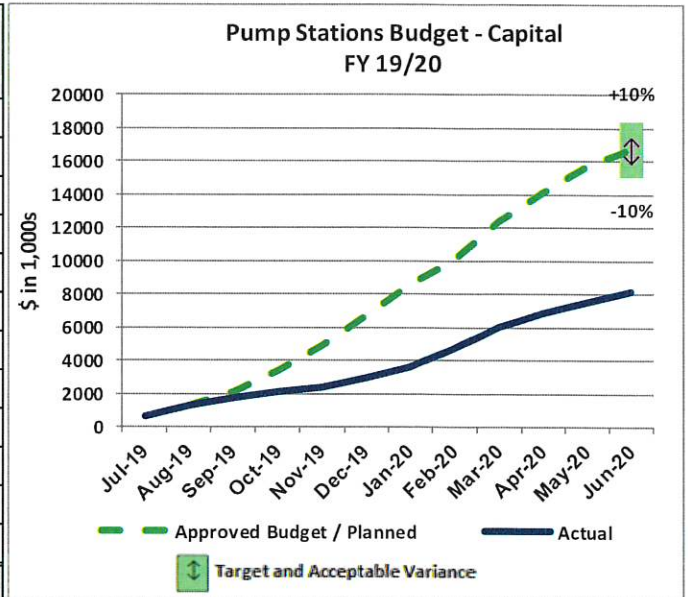
TARGET & ACCEPTABLE VARIANCE (FY 19/20): \$16.7M, 10 percent

GREGORY REED

SEP 08 2020

STATUS: Outside Acceptable Variance

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	7,561	-8,147	-51.9%	
Jun-20	16,713	8,154	-8,559	-51.2%	
<b>Acceptable Variance</b>			<b>± 10%</b>		



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 June 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 was put on hold.

- 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**

- Pump and motor replacements have been deferred in response to impacts related to rotational work assignment and no pumps and/or motors have been replaced during the month of June due to reduced jobsite reporting schedules due to Covid19.
- The Redmont Pump Station schedule was delayed by seven months due to pump motor redesign. Design is anticipated to be completed in September 2020.
- Victory Pump Station was put on hold until November 2021 due to the need for a geotechnical investigation and property acquisition.
- Delays with the procurement of equipment for the Griffith Park PS115 Project account for about \$1.5M of the variance. R&C is closely monitoring the procurement of the Skid Pumping system to ensure delivery of

Within Acceptable Variance  Outside Acceptable Variance  Exceeds Target  Needs Attention

the equipment and completion of project installation by early 2021.

**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.

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

RESPONSIBLE MANAGER: Gregory R. Reed

REPORTING PERIOD: June 2020

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

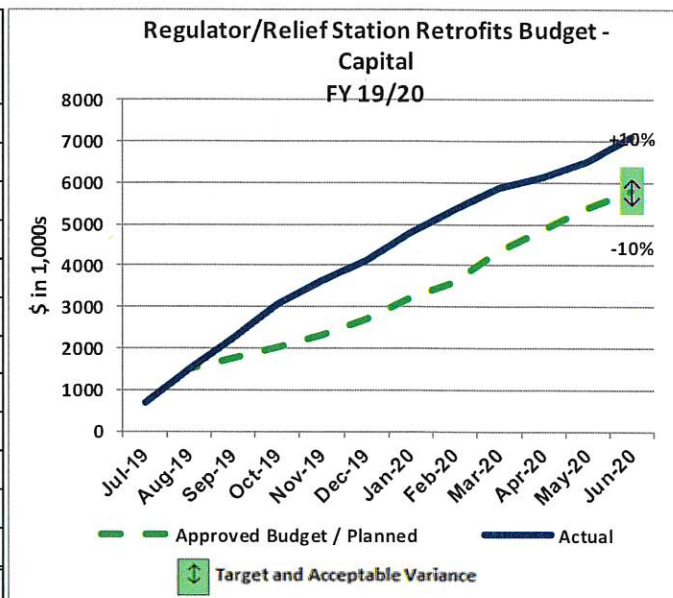
TARGET & ACCEPTABLE VARIANCE (FY 19/20): \$5.8M, 10 percent

GREGORY REED

STATUS: Exceeds Target

AUG 14 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	6,512	1,147	21.4%	
Jun-20	5,795	7,092	1,297	22.4%	
Acceptable Variance			± 10%		



SOURCE OF DATA: FI 24150

## 1. BACKGROUND / PURPOSE

- Regulator/relief stations are necessary to maintain and preserve 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 June 2020, nine regulator stations have been retrofitted.

## 3. PERFORMANCE / VARIANCE ANALYSIS AND YEAR-END PROJECTION

- Water System exceeded the goal of eight retrofits for this year. This was accomplished by adding a second crew to support this program.
- A large valve on the Van Ness & 3<sup>rd</sup> 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 June due to the handling of other priorities and the shortage of crews because of rotational work assignments.

## 4. MITIGATION PLAN AND / OR RECOMMENDATIONS

- Exceeding Target.

Within Acceptable Variance  Outside Acceptable Variance  Exceeds Target  Needs Attention

# LADWP RATES METRIC – MAINLINE REPLACEMENT (Water)

RESPONSIBLE MANAGER: Breonia Lindsey/Sandra Foster

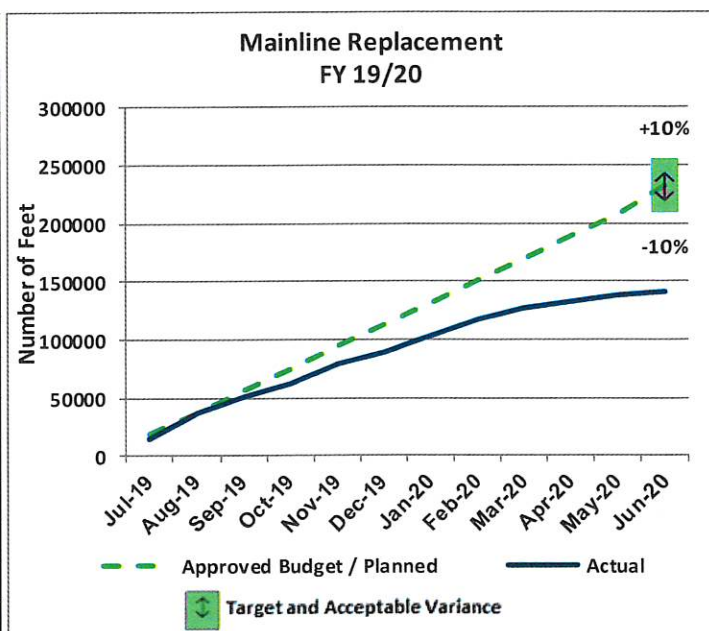
REPORTING PERIOD: June 2020

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	137,011	-69239	-33.6%	
Jun-20	232,000	140,450	-91550	-39.5%	
<b>Acceptable Variance</b>			<b>± 10%</b>		



SOURCE OF DATA: FI 26331, Job 30067

## 1. BACKGROUND / PURPOSE

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

## 2. ACHIEVEMENTS / MILESTONES MET

- As of June 2020, 140,450 feet of mainline have been installed.

## 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 did not reach the initial or re-estimated 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.

## 4. MITIGATION PLAN AND / OR RECOMMENDATIONS

- 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)

GREGORY REED

RESPONSIBLE MANAGER: Gregory R. Reed

REPORTING PERIOD: June 2020

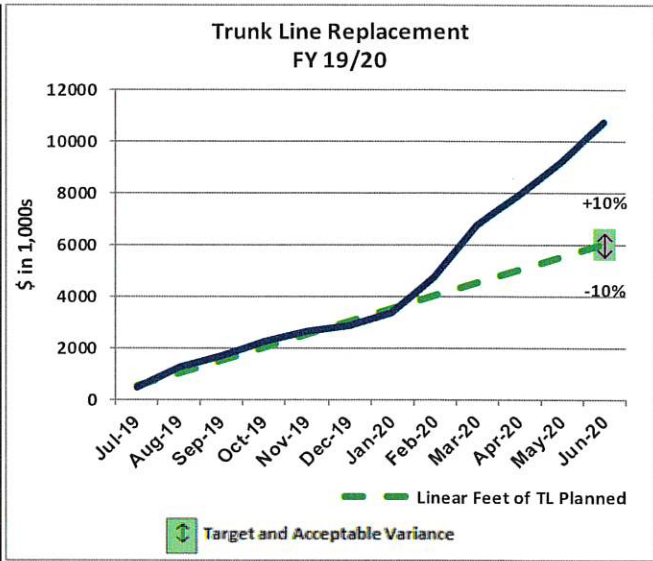
DEFINITION OF RATES METRIC: Feet of trunk line replaced against the plan.

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

SEP 08 2020

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	9,178	3,678	66.9%	
Jun-20	6,000	10,742	4,742	79.0%	
Acceptable Variance			± 10%		



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 June 2020.
- 1,036 feet of trunk line was installed on RSC 7 through June 2020.

**2. ACHIEVEMENTS / MILESTONES MET**

- 777 feet of trunk line was installed on City Trunk Line South Unit 3 through June 2020.
- 1,391 feet of trunk line was installed on Foothill Trunk Line through June 2020.
- 1,209 feet of trunk line was installed on MWD-LA 30 through June 2020.
- 506 feet of trunk line was installed on Machado Lake Pipeline through June 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. 3,298 feet of trunk line was installed on Century Trunk Line Unit 1 through June 2020.

**3. PERFORMANCE / VARIANCE ANALYSIS AND YEAR-END PROJECTION**

- 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 January 2020.

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

- Exceeding Target.

# LADWP RATES METRIC – METER REPLACEMENT (Water)

RESPONSIBLE MANAGER: Breonia Lindsey/Sandra Foster

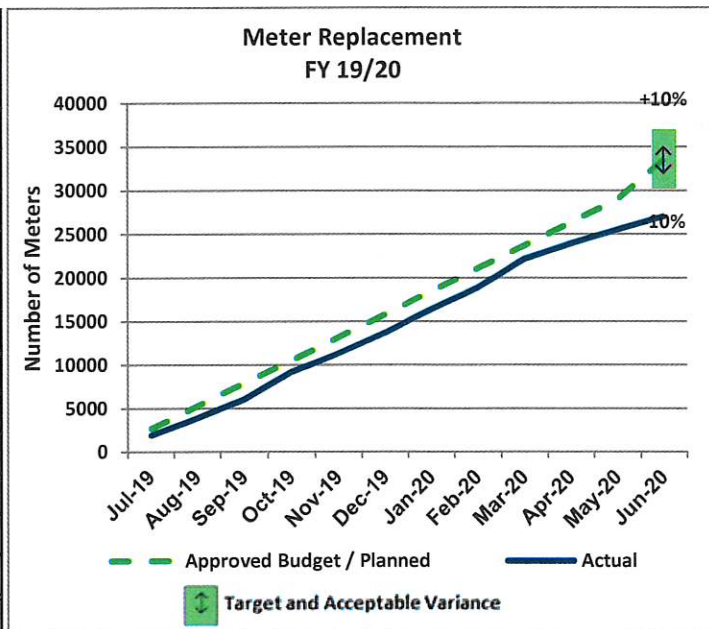
REPORTING PERIOD: June 2020

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

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

 STATUS: **Outside 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	25,454	-3421	-11.8%	
Jun-20	33,500	26,964	-6536	-19.5%	
Acceptable Variance			± 10%		



SOURCE OF DATA: FI 27215, Job 30053

## 1. BACKGROUND / PURPOSE

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

## 2. ACHIEVEMENTS / MILESTONES MET

- As of June 2020, 26,964 meters of the 31,500 re-estimated fiscal year goal have been replaced.

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

- The rate of meter replacement for this reporting period is outside the acceptable variance range due to high demand for service disconnects and challenges filling vacant positions. Also, due to the Covid-19 pandemic, field work was reduced to enable physical distancing and help stop the spread of Covid-19.

## 4. MITIGATION PLAN AND / OR RECOMMENDATIONS

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

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

RESPONSIBLE MANAGER: Gregory R. Reed

REPORTING PERIOD: June 2020

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

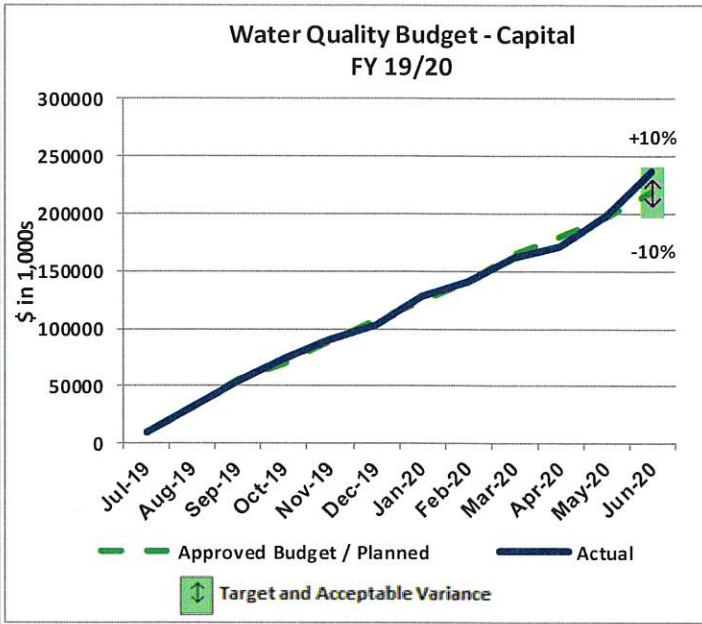
GREGORY REED

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

AUG 14 2020

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	198,005	1,573	0.8%	
Jun-20	219,104	237,749	18,645	8.5%	
<b>Acceptable Variance</b>			<b>± 10%</b>		



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 September 2020.
- Installation, testing, and disinfection of all pipelines for the LA Reservoir UV Disinfection Plant are complete.
- Purchase Order for the Filtration Package on the 99<sup>th</sup> St. Wells Filtration Plant was issued in September 2019. 100% Design Drawings were completed at the beginning of August, 2020.
- Construction for 99<sup>th</sup> St. Wells Chloramination Station was completed in December 2019.

- 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. Design started on November 14, 2019 and is expected to reach 60% in August 2020.
- 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.



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

Clarifying

RESPONSIBLE MANAGER: Evelyn Cortez-Davis

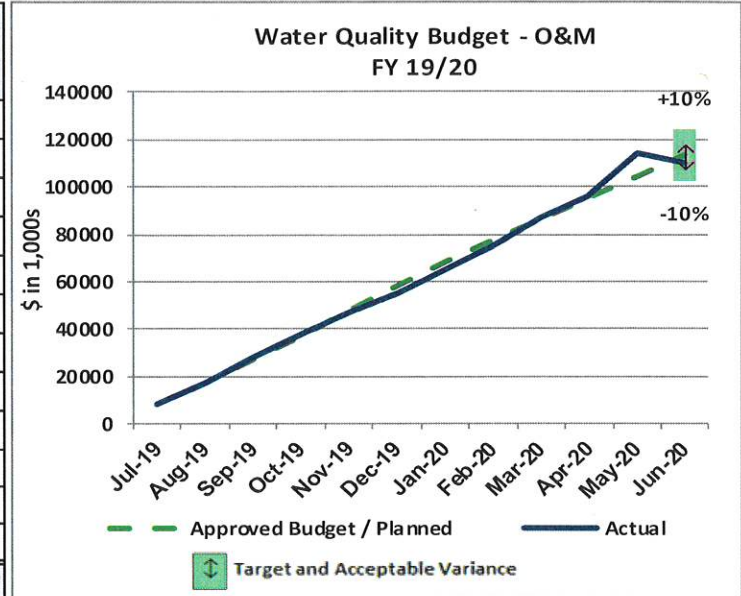
REPORTING PERIOD: June 2020

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	114,344	10,079	9.7%	
Jun-20	113,272	110,261	-3,011	-2.7%	
<b>Acceptable Variance</b>			± 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 Grahek Aug 7, 2020 [Water]

RESPONSIBLE MANAGER: Michael E. Grahek

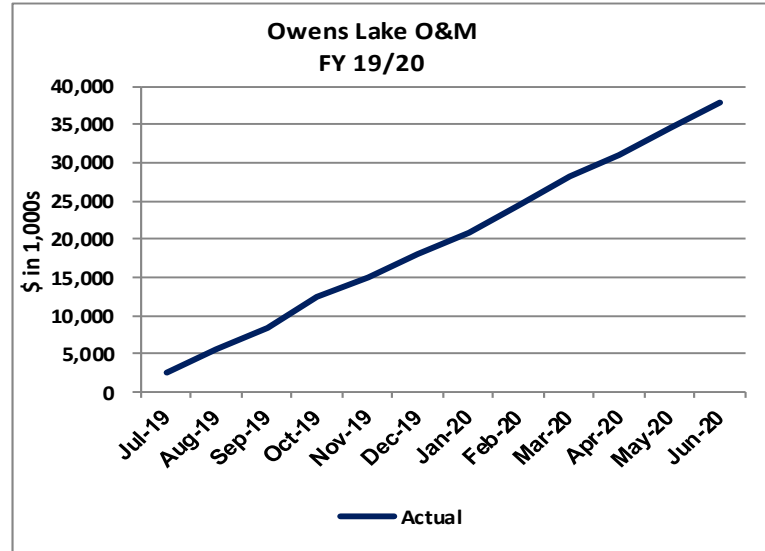
REPORTING PERIOD: June 2020

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	34,505
Jun-20	37,914



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

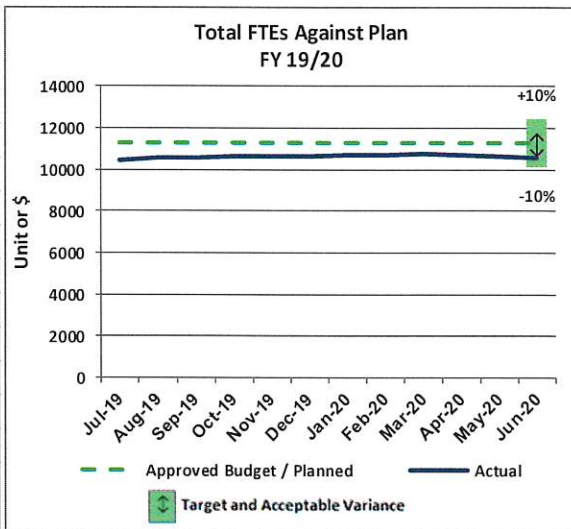
REPORTING PERIOD: June 2020

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	10,651	-612	-5.4%	
Jun-20	11,263	10,555	-708	-6.3%	
<b>Acceptable Variance</b>			± 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 = 38
- Attrition = 125
- Net New Employees = -87

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

N/A

**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

REPORTING PERIOD: June 2020

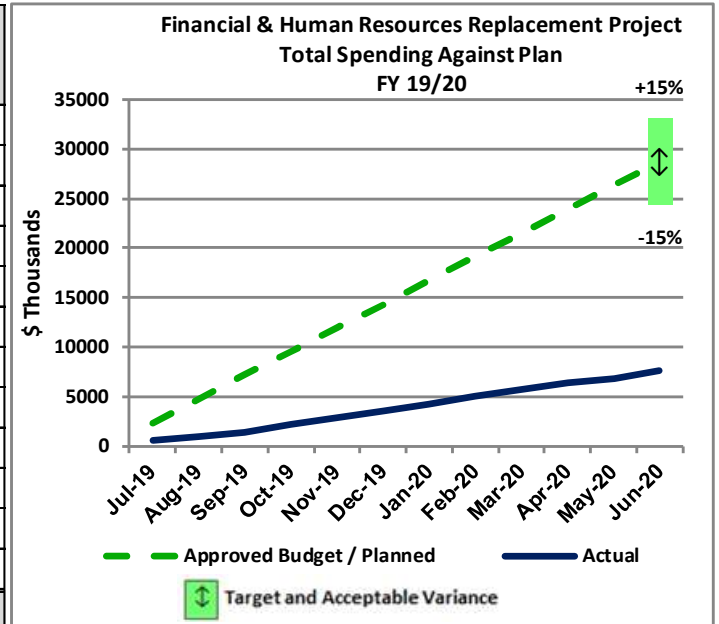
Information Technology Corporate Program Management Office

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	6,859.8	-19471	-73.9%	9271.6
Jun-20	28,724.7	7,597.7	-21127	-73.5%	9947.5
<b>Acceptable Variance</b>			± 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
- June 22 to July 9, 2020: Shortlist Demo & Interviews conducted

**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

Within Acceptable Variance  Outside Acceptable Variance  Exceeds Target  Needs Attention

# 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: June 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	June 22-July 9, 2020
ERP SW Vendor Selected	May, 2020	In-Progress
Vendor Information Day	June, 2020	In-Progress
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
- June 22 to July 9, 2020: Shortlist Demo & Interviews conducted

## 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 June/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: June 2020

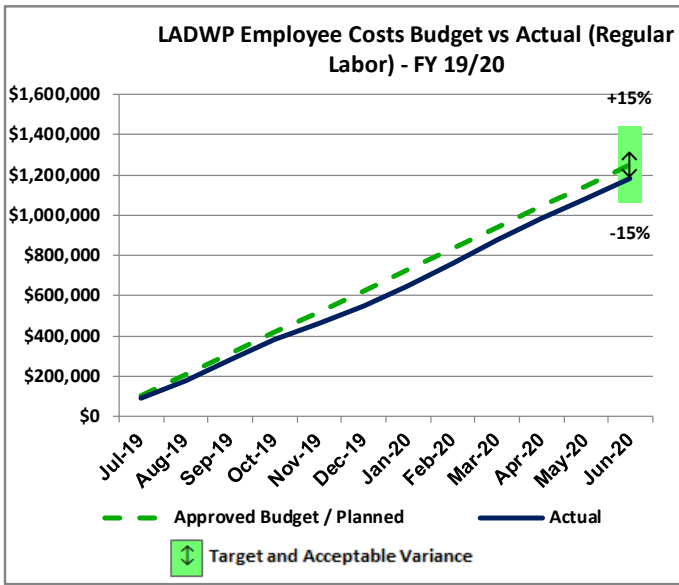
DEFINITION OF RATES METRIC: LADWP employee costs (including regular labor, overtime, pension and healthcare, excluding daily exempt and Utility Pre-Craft Trainee) budget vs. actual (\$M)

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

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

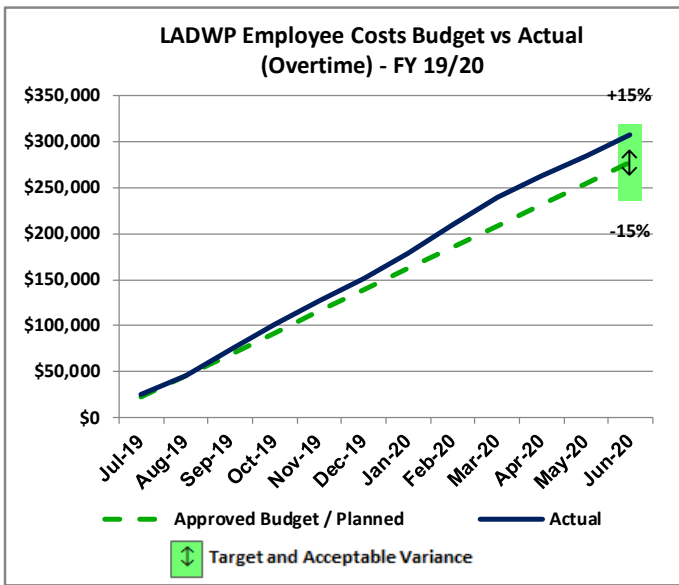
**REGULAR LABOR STATUS:** Within Acceptable Variance

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	1,080,524	-66854	-5.8%	
Jun-20	1,251,685	1,181,996.3	-69689	-5.6%	
<b>Acceptable Variance</b>			± 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	284,848	30654	12.1%	
Jun-20	277,303	307866.7	30564	11.0%	
<b>Acceptable Variance</b>			± 15%		



Employee Cost Category	YTD as of June 2020				FY 19/20 Approved
	Budget	Actual	Variance	Variance %	
Regular Labor	1,251,685	1,181,996	-69,689	-5.6%	1,251,685
Overtime	277,303	307,867	30,564	11.0%	277,303
<b>Regular Labor + Overtime</b>	<b>1,528,988</b>	<b>1,489,863</b>	<b>-39,125</b>	<b>-2.6%</b>	<b>1,528,988</b>
Health Care Allocation	365,627	334,848	-30,780	-8.4%	333,763
Retirement & Death Benefit	589,791	451,308	-138,482	-23.5%	531,377
<b>Total</b>	<b>2,484,406</b>	<b>2,276,019</b>	<b>-208,387</b>	<b>-8.4%</b>	<b>2,394,128</b>

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:** June 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 June 2020:

Total Number of Water and Power Employees per Customer Meter  $10,555/2,303,436 = .0046$

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

System	Occupied
Power	5,245
Water	2,044
Joint	3,266
Total	10,555

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

	Total
Power	1,593,676
Water	709,760
Total	2,303,436

## 4. MITIGATION PLAN AND / OR RECOMMENDATIONS

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

# LADWP RATES METRIC – GHG Emissions Reduction Ratio (Joint)

RESPONSIBLE MANAGER: Mark Sedlacek, Katherine Rubin *Katherine Rubin* REPORTING PERIOD: As of September 2020

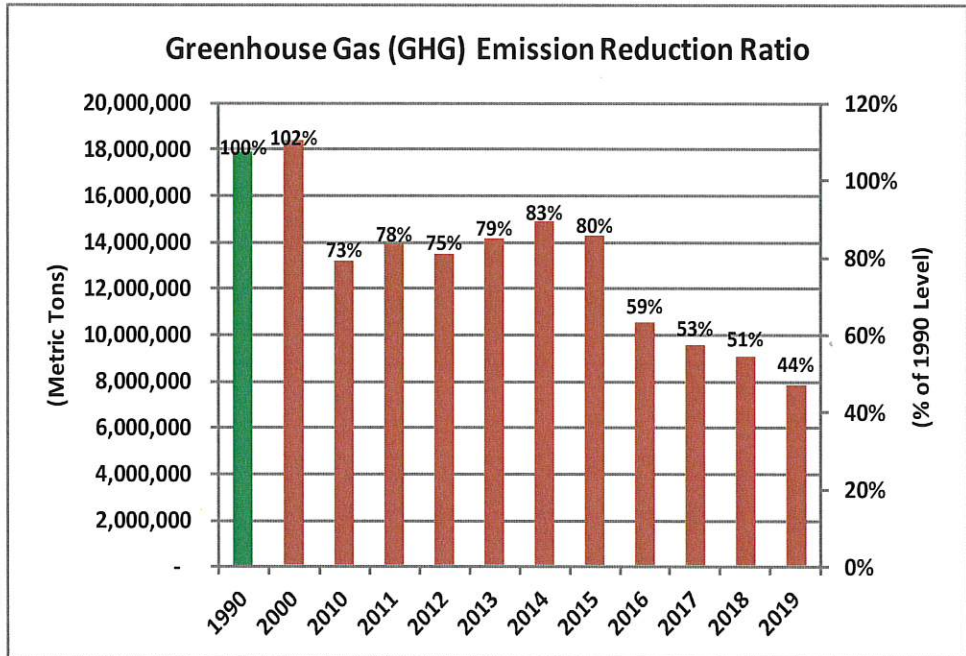
DEFINITION OF RATES METRIC: Current Year GHG Emissions /1990 GHG Emissions

TARGET & ACCEPTABLE VARIANCE (CY 2019): 47%; +5%

STATUS: Within Acceptable Variance

- CY 2019 Target: 47% of 1990 GHG Emission level      CY 2019 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	13,165,764	73%
2011	13,900,590	78%
2012	13,519,339	75%
2013	14,174,036	79%
2014	14,911,781	83%
2015	14,312,947	80%
2016	10,566,904	59%
2017	9,554,640	53%
2018	9,060,486	51%
2019	7,884,289	44%



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

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

- No variance explanation needed.

## 3. LADWP ACHIEVEMENTS / MILESTONES

- Early divestiture of Navajo Generating Station 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 2019 included 34% renewable energy.
- LADWP's 2019 emissions are 56% below its 1990 emissions baseline.

## 4. MITIGATION PLAN AND / OR RECOMMENDATIONS

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

# LADWP RATES METRIC – Energy Savings Variance Report (Joint)

RESPONSIBLE MANAGER: David Jacot

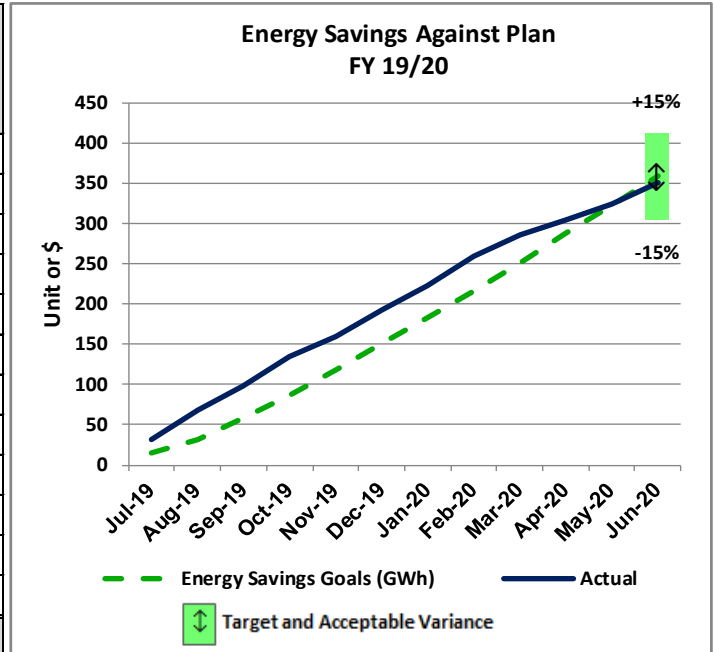
REPORTING PERIOD: June 2020

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	323.9	1	0.3%	
Jun-20	358.6	349.7	-9	-2.5%	
<b>Acceptable Variance</b>			± 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 June 2020, or for the FY 19-20 is at 349.7 GWh, 9 GWh or 2.5% below the 358.6 GWh FY target, mainly because of suspended programs/activities due to Covid-19 & “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 – BUDGET VARIANCE ENERGY EFFICIENCY (JOINT)

RESPONSIBLE MANAGER: David Jacot

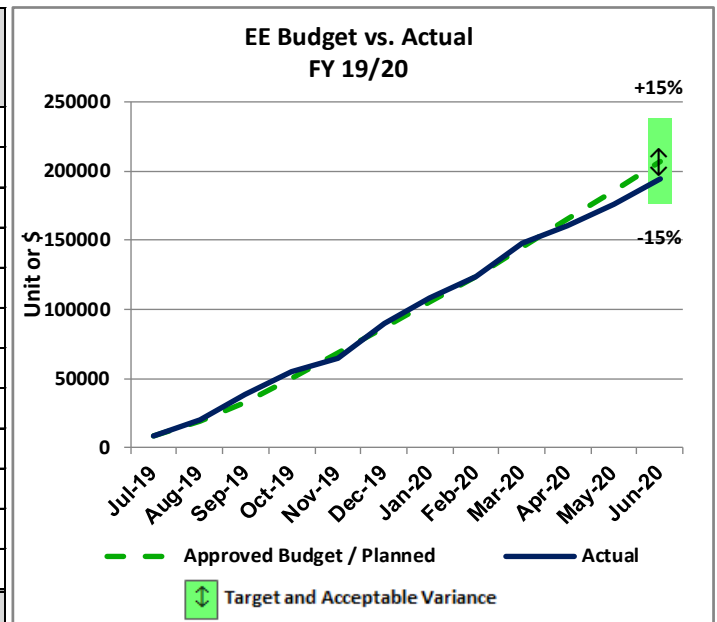
REPORTING PERIOD: June 2020

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

TARGET &amp; 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	175,686	-10378	-5.6%	
Jun-20	206,737	194,789	-11948	-5.8%	
<b>Acceptable Variance</b>			<b>± 15%</b>		



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 \$194.8M as of June 2020, end of FY 19-20, 2020, 11.9M or 5.8% below the approved budget, mainly due to the suspension of programs and activities as a result of 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: June 2020

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

TARGET & ACCEPTABLE VARIANCE (FY 17/18): Annual metric: Levelized Cost \$.0.082 +/- 15%

**STATUS** Within Acceptable Variance

SOURCE OF DATA: 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 III**  
**LADWP Equity Metrics Data Initiative**

# Equity Metrics Data Initiative

Equity Core Category	Equity Metric	Page #
Water & Power Infrastructure Investment	Water Quality Complaints	1-2
	Mainline Replacement	3-4
	SAIFI (System Average Interruption Frequency Index)	5, 7-8
	SAIDI (System Average Interruption Duration 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	21-23
	Home Energy Improvement Program	24-25
	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



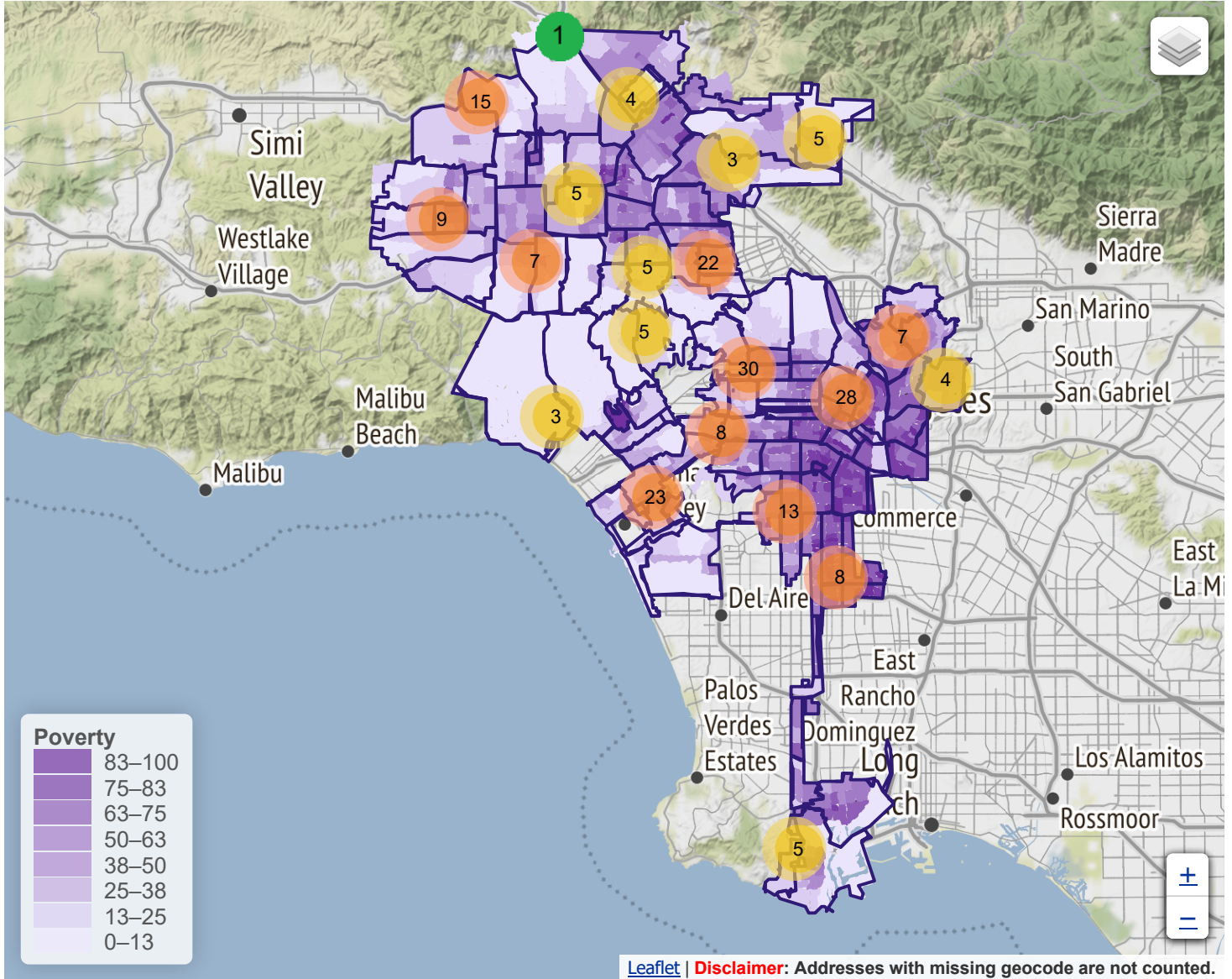
### LADWP EMDI - Water & Power Infrastructure Investment

RESPONSIBLE MANAGER:Serge Haddad

(Reporting Period: May 2020 - Oct 2020)

### Water Quality Complaints

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



# LADWP EQUITY METRIC – *Water Quality Customer Inquiries*

RESPONSIBLE MANAGER: Serge Haddad

REPORTING PERIOD: May 2020 - Oct 2020

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

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## 1. NARRATIVE / BACKGROUND

During the period of May to October 2020, a total of 408 water quality inquiries were received by the Water Quality Division including 126 inquiries regarding taste and/or odor and 90 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

- The Water Quality Division has resumed normal customer site inspections while practicing COVID-19 safety protocols.

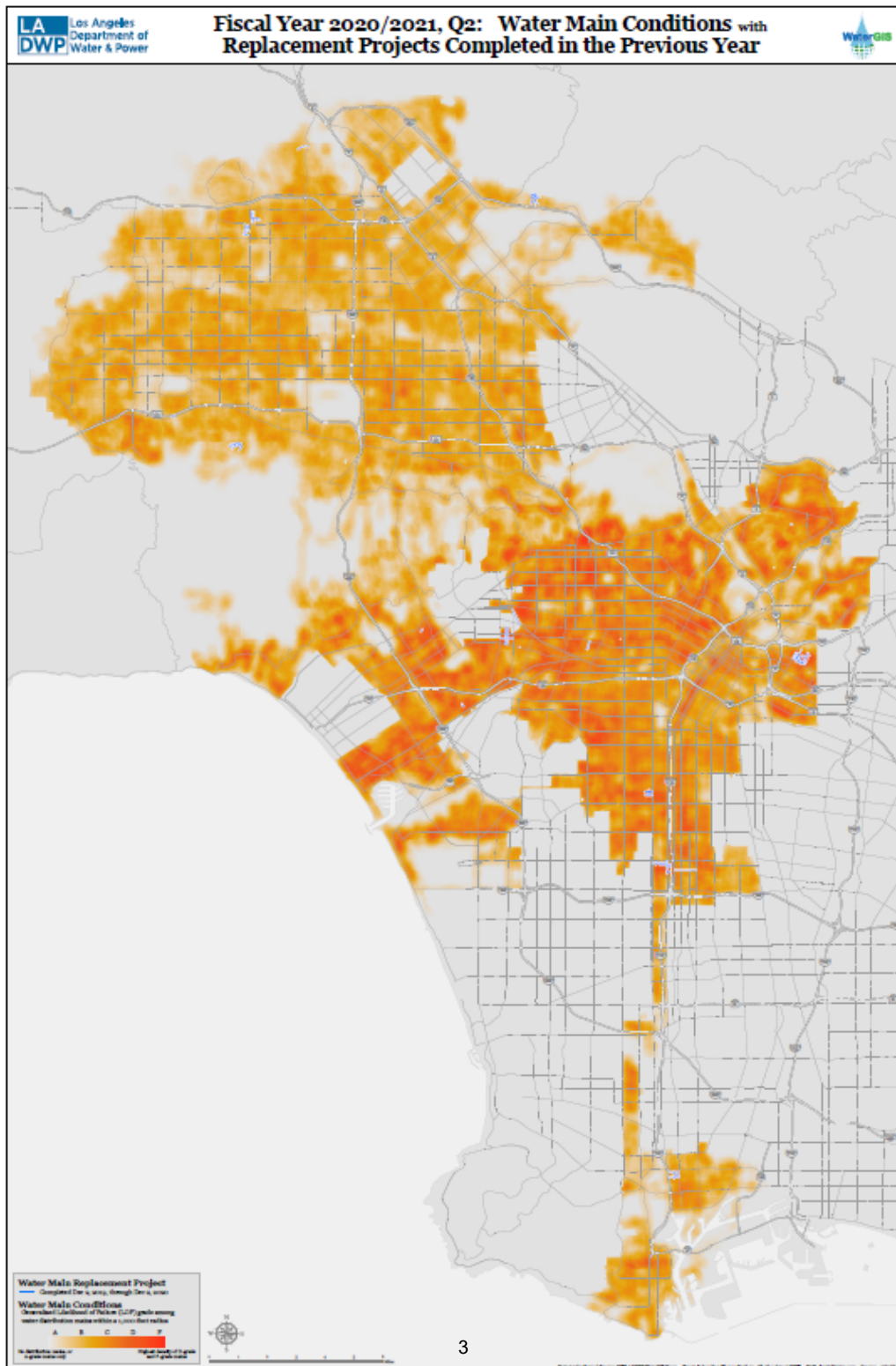
## 5. OUTREACH STRATEGY / PLAN

- 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 and prevalence amongst various customer types and geographical areas, including disadvantaged communities.
- The Water Quality Division is seeking to expand the Hydration Station Initiative Program to include other City Departments and Agencies and non-City entities (i.e., non-City of Los Angeles public agencies and private organizations) to improve access to high quality tap water throughout the City.
- Through the Non-profit Community Partnerships Grant, WeTap has launched the Tap Water Talks virtual series to promote the health and environmental 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 – *Water System Probability of Failure & Planned Replacements (Water)*

RESPONSIBLE MANAGER: Alvin Bautista

REPORTING PERIOD: May 2020 – Oct 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) that make up 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's mainline replacement program is critical towards providing continuous water service reliability to LADWP customers. Equity is achieved by focusing efforts to replace pipes throughout the City in areas that experience higher-than-normal pipe break rates, causing frequent 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 2 million feet of mainline since Mainline Replacement Program inception (2006)
- Pilot-testing of alternative earthquake resilient pipe manufacturer to develop a competitive and diverse supplier base for resilient pipes
- Maintained a leak rate that, at 15 leaks per 100 miles of pipe, is well below the national industry average of 25 leaks per 100 miles
- Implementing mainline replacement effort to upgrade pipe infrastructure in parts of the City with the highest leak density

- As of the end of October 2020, mainline replacement was approximately 31% of the 174,000 feet goal for Fiscal Year 2020/21. Crews are fully deployed as of this report, and achieving the footage goal will be strongly influenced by issues described below.

## 4. ISSUES

Rotational work assignments for field crews have been implemented to minimize risks of transmission of the COVID19 virus. This and reduction of work hours to keep employees safe during periods of civil unrest have impacted construction productivity. Labor staffing, regulations, and additional work measures necessary to increase overall safety are other issues that are dealt with on a regular basis, which impact mainline replacement efforts.

## 5. OUTREACH STRATEGY / PLAN

- Utilize resource sharing among districts to systematically replace pipes in areas of greatest leak density
- Aggressively seek eligible candidates to hire and fill vacant and open positions
- Develop a Safety and Training Program that will 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

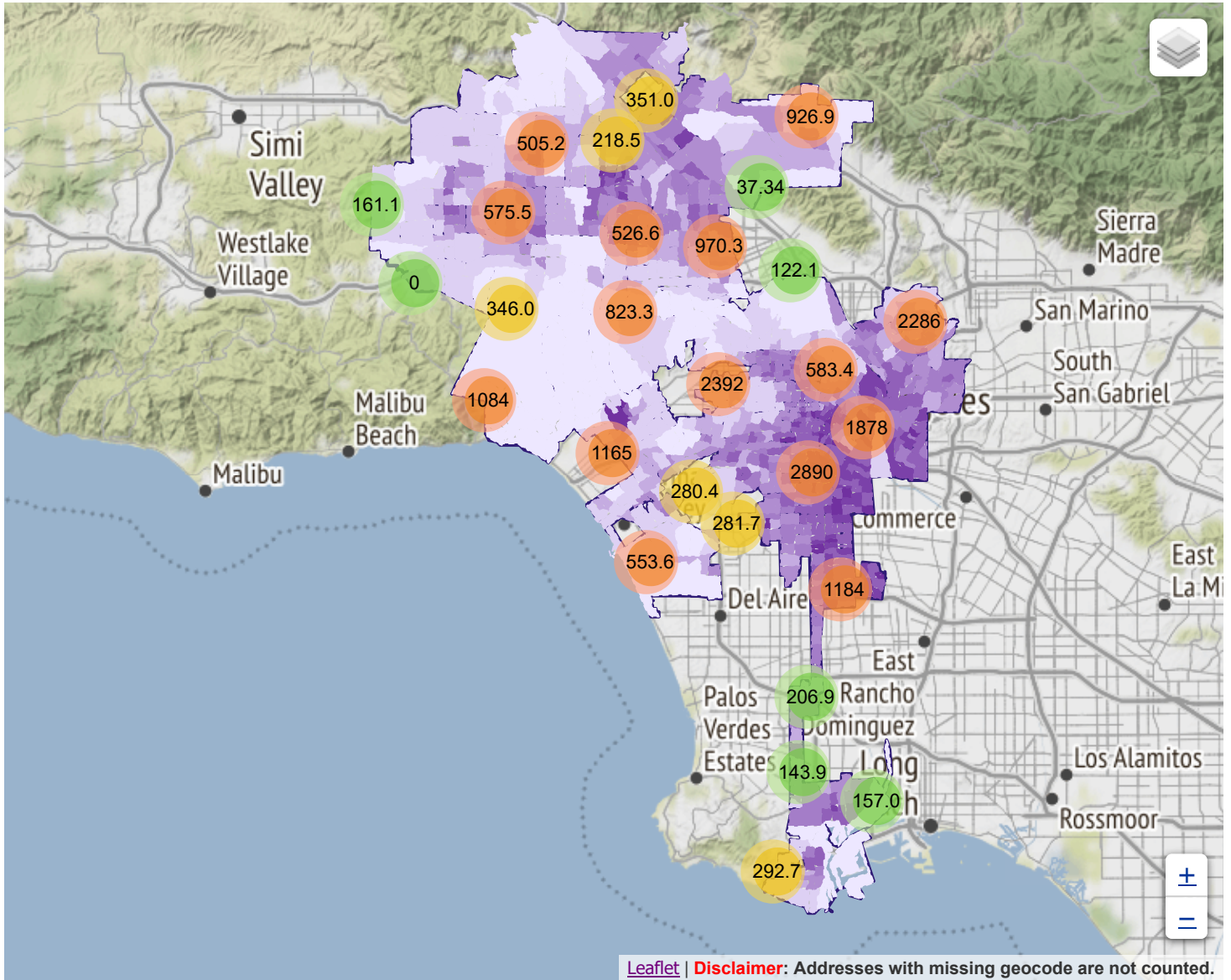
(Reporting Period: Nov 2019 - Oct 2020)

## 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

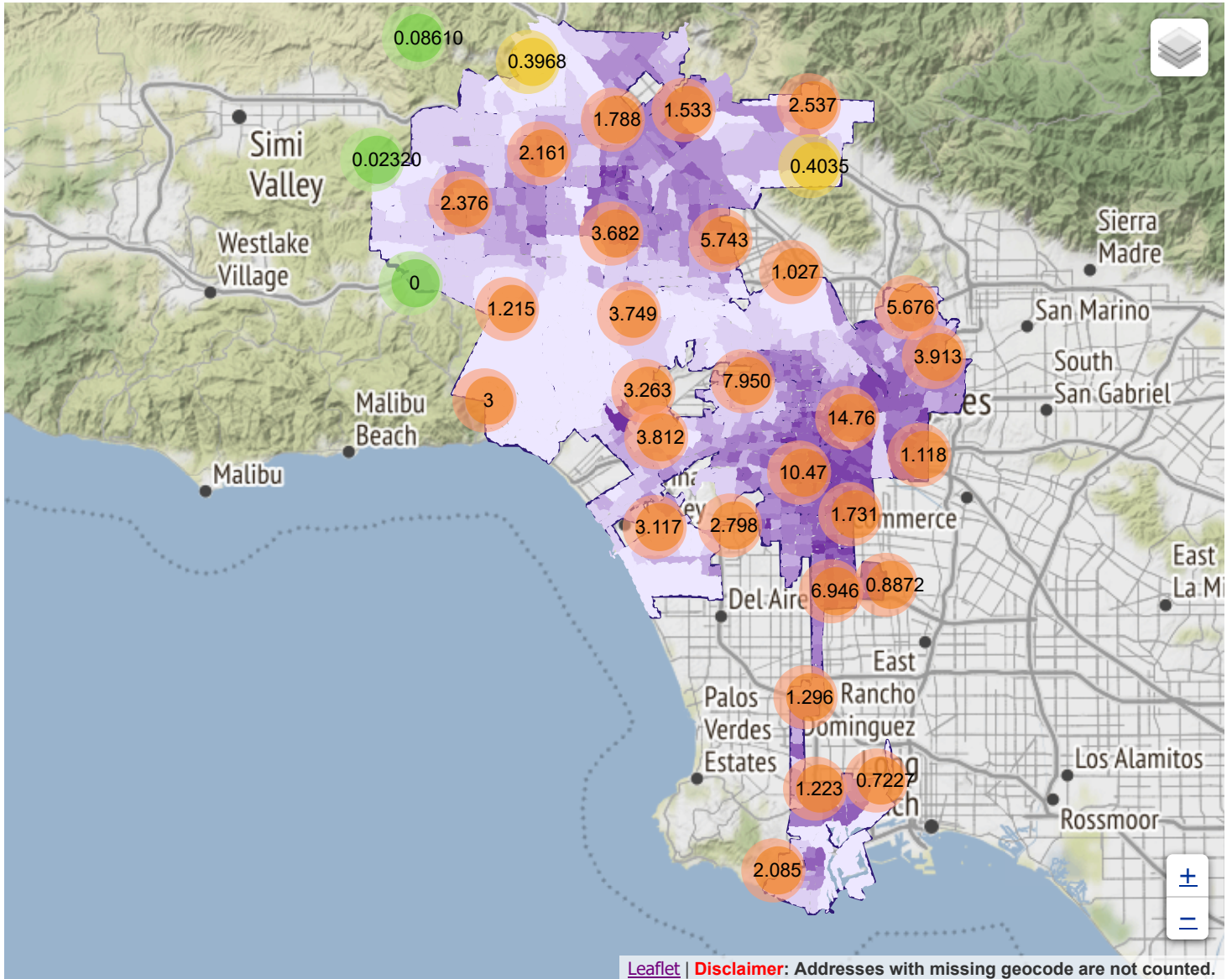
(Reporting Period: Nov 2019 - Oct 2020)

## SAIFI

The following reliability indices are used to measure the reliability performance of LADWP's distribution system in a 12-month rolling average: (Map below based on one month data)

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

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

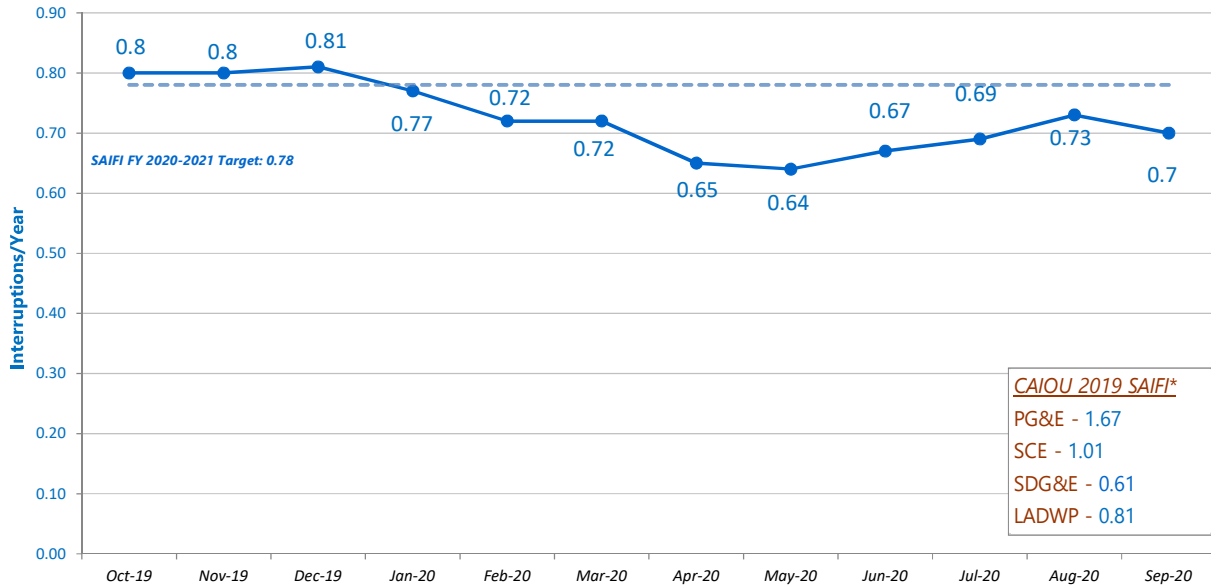


# LADWP EQUITY METRIC – SAIFI AND SAIDI (POWER)

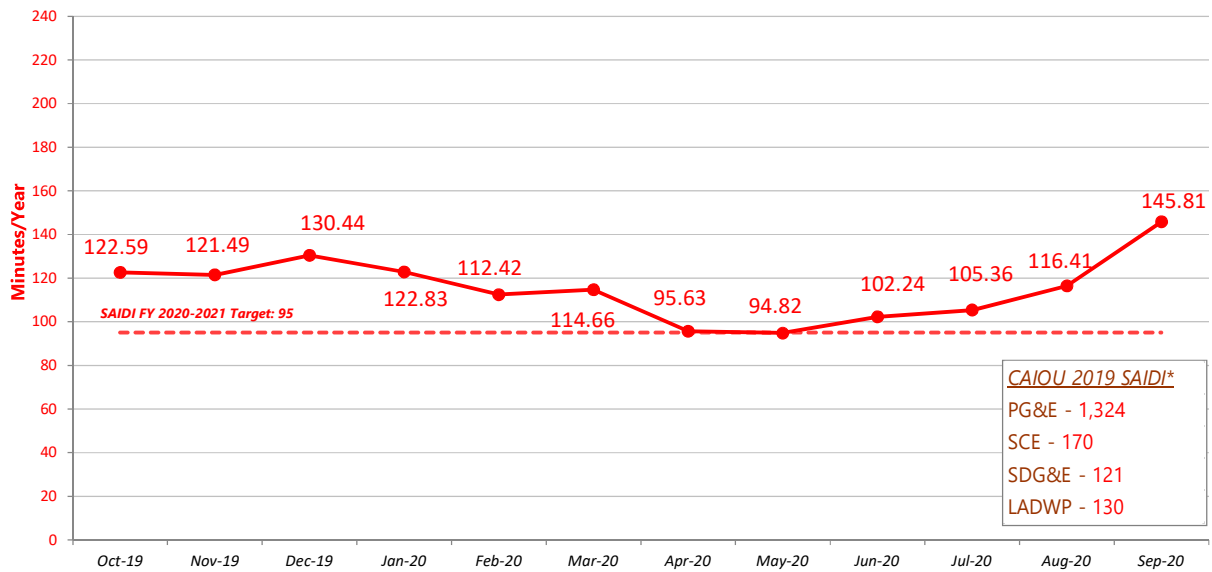
RESPONSIBLE MANAGER: Herman Cheng *Hally*  
 EQUITY CORE CATEGORY: Water and Power Infrastructure Investment

REPORTING PERIOD: Oct 2020 (Rolling Data Ending Sep 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 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 duration of sustained interruptions (measured in minutes) 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. GOALS and ACHIEVEMENTS

- For FY20/21, the goal for SAIFI is 0.78 and SAIDI is 95.00 minutes.
- 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 1<sup>st</sup> quartile at 0.75 for Calendar Years 2014 to 2018 when compared to other investor-owned utilities.

## 4. ISSUES

- The reliability indices for September 2020 are SAIFI at 0.70 and SAIDI at 145.81 minutes.
- SAIDI is slightly higher than normal due to severe weather events causing outages for prolonged durations, such as the heavy rainstorms and wind gusts in December 2019 and heat waves that lasted multiple days in August 2020 and September 2020. In June 2020, DS-32 Bank 1 tripped off due to balloons and affected 6 feeders.
- Circuit Breaker (CB) failures, due to aging equipment and maintenance efforts continue to be a problem since 2014.
- Balloon-related outages were on a steady rise since 2014. 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. There were fewer than 340 balloon outages in 2019, a reduction of nearly 25% compared to the previous year.

## 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, Brookside HOA, and Cheviot Hills 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.



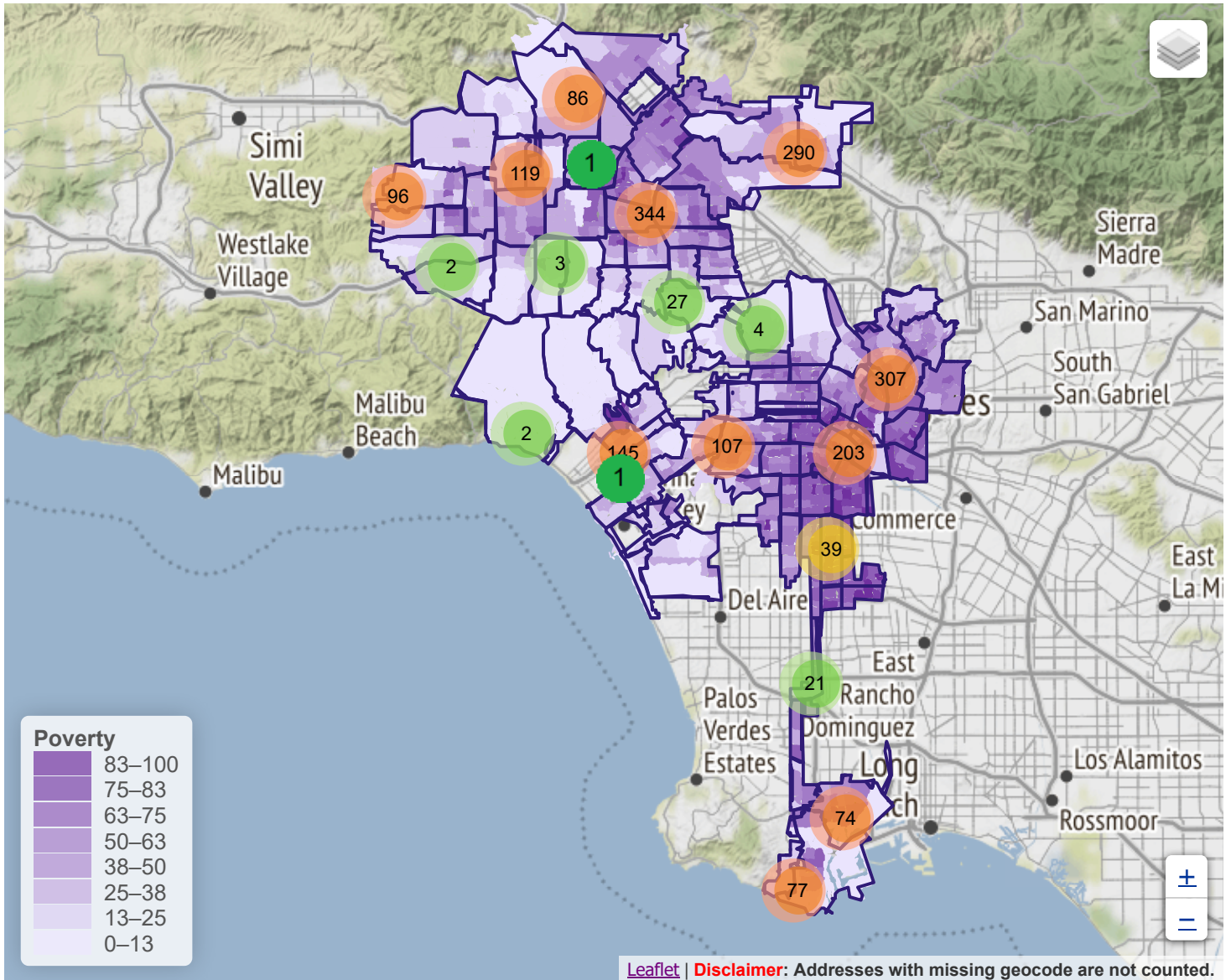
# LADWP EMDI - Water & Power Infrastructure Investment

RESPONSIBLE MANAGER: Arthur Johnson

(Reporting Period: May 2020 - Oct 2020)

## PSRP – Pole 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

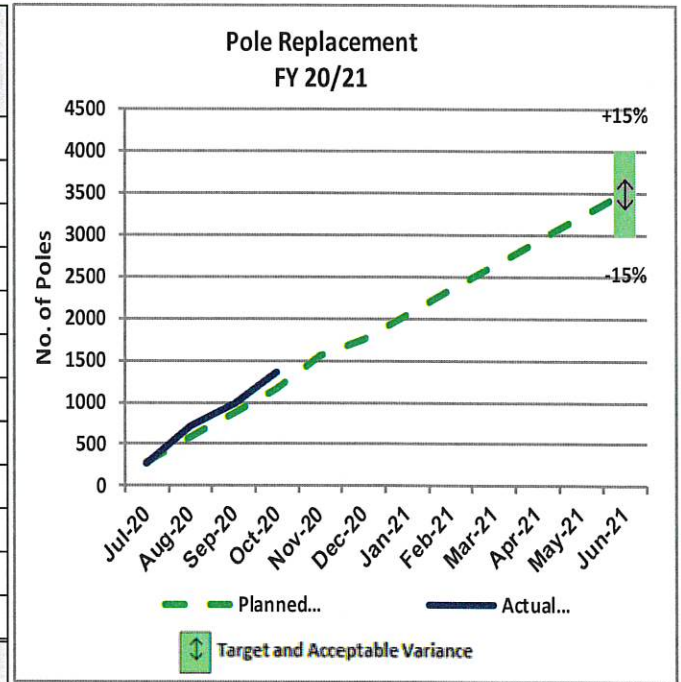
REPORTING PERIOD: October 2020

DEFINITION OF RATES METRIC: Number of Poles Replaced Against Plan

TARGET & ACCEPTABLE VARIANCE (FY 20/21): Target = 3,500; Acceptable Variance = ± 15%

STATUS: Exceeds Target

FYTD as of:	Planned (No.)	Actual (No.)	Variance		Re-Estimate
			No.	%	
Jul-20	292	272	-20	-6.8%	
Aug-20	583	711	128	22.0%	
Sep-20	876	981	105	12.0%	
Oct-20	1,168	1,355	187	16.0%	
Nov-20	1,549				
Dec-20	1,752				
Jan-21	2,043				
Feb-21	2,335				
Mar-21	2,628				
Apr-21	2,919				
May-21	3,212				
Jun-21	3,500				
Acceptable Variance			± 15%		



SOURCE OF DATA: Jobs P6322 (KPI # 04.01.01.03)

## 1. BACKGROUND / PURPOSE

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

## 2. CRITERIA

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

## 3. ACHIEVEMENTS / MILESTONES MET

- To date, the target was to replace 1168 poles and the current actual number of poles replaced is 1,355.

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

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

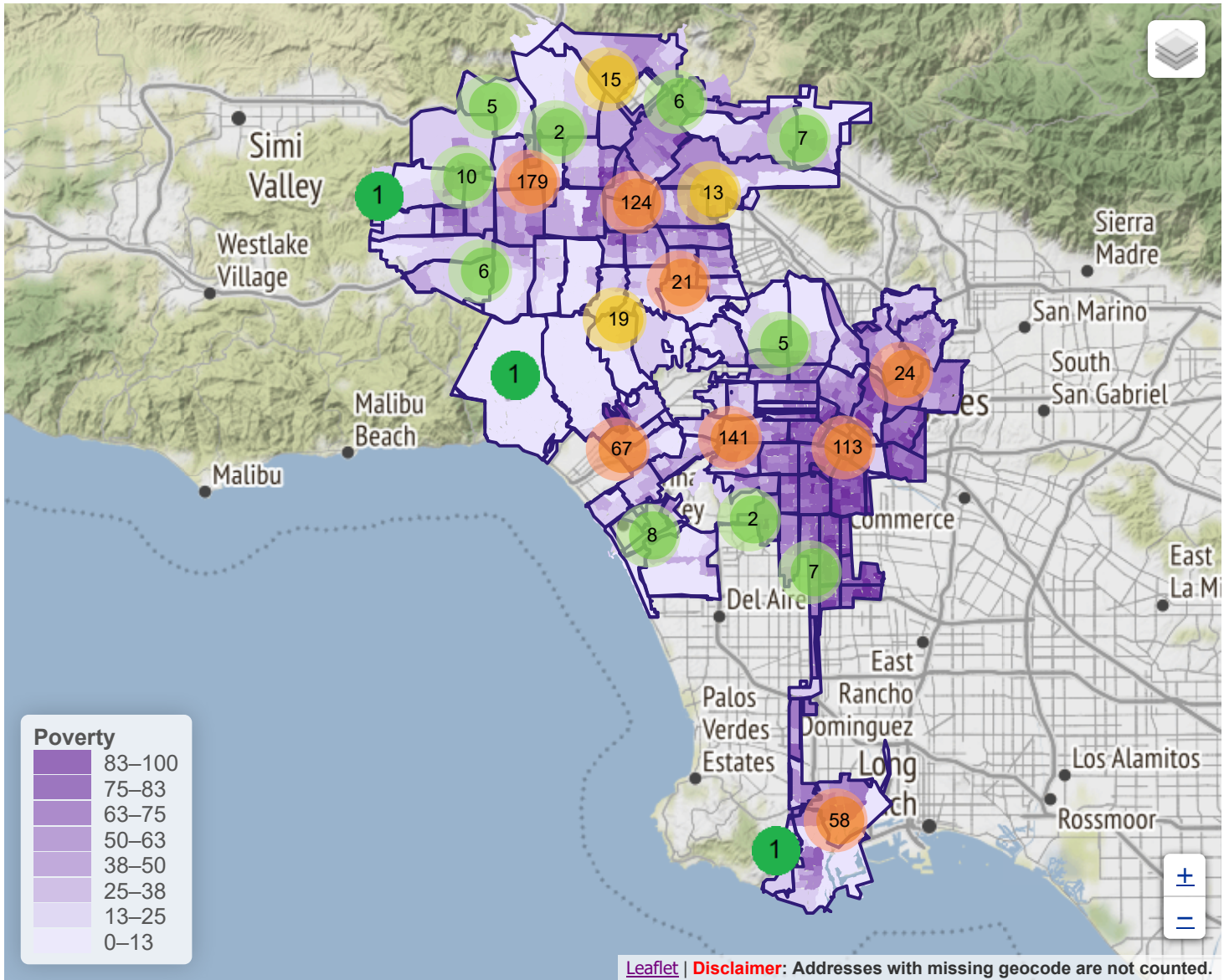
# LADWP EMDI - Water & Power Infrastructure Investment

RESPONSIBLE MANAGER: Arthur Johnson

(Reporting Period: May 2020 - Oct 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

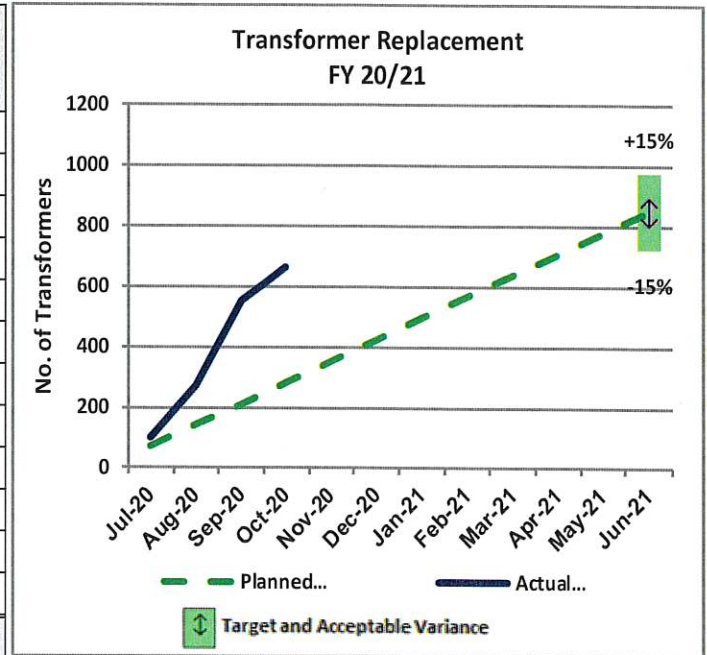
REPORTING PERIOD: October 2020

DEFINITION OF RATES METRIC: Number of Transformers Replaced Against Plan

TARGET & ACCEPTABLE VARIANCE (FY 20/21): Target = 850; Acceptable Variance = ± 15%

STATUS: Exceeds Target

FYTD as of:	Planned (No.)	Actual (No.)	Variance		Re-Estimate
			No.	%	
Jul-20	71	100	29	40.8%	
Aug-20	142	271	129	90.8%	
Sep-20	212	553	341	160.8%	
Oct-20	283	661	378	133.6%	
Nov-20	354				
Dec-20	425				
Jan-21	496				
Feb-21	566				
Mar-21	637				
Apr-21	708				
May-21	779				
Jun-21	850				
Acceptable Variance			± 15%		



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 283 transformers and the current actual number of transformers replaced is 661.

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

- The actual number of transformers replaced exceeds the ±15% threshold due to heat storms in August and September.

## 5. MITIGATION PLAN AND / OR RECOMMENDATIONS

- PTD will continue to monitor the job as the year progresses and adjust FY goals to reflect the increase of capturing transformer work more accurately.
- PTD will continue to monitor how the work is captured and shift assets to different jobs as needed.

## 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.

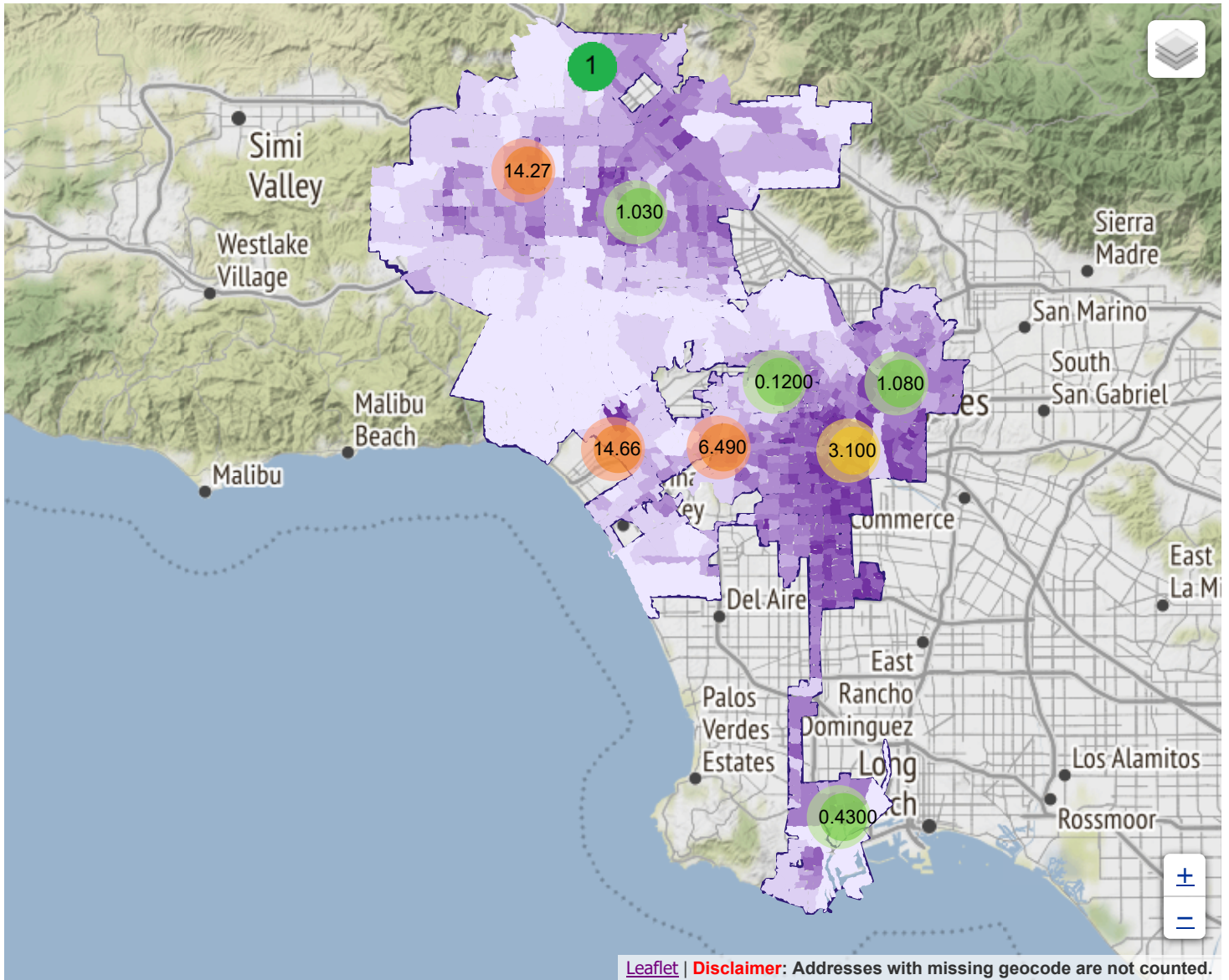
# LADWP EMDI - Water & Power Infrastructure Investment

RESPONSIBLE MANAGER:Sager Farraj

(Reporting Period: May 2020 - Oct 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)

*Handwritten initials: JH, S/F*

RESPONSIBLE MANAGER: Sager Farraj  
Power Planning Development and Engineering Division

REPORTING PERIOD: October 2020

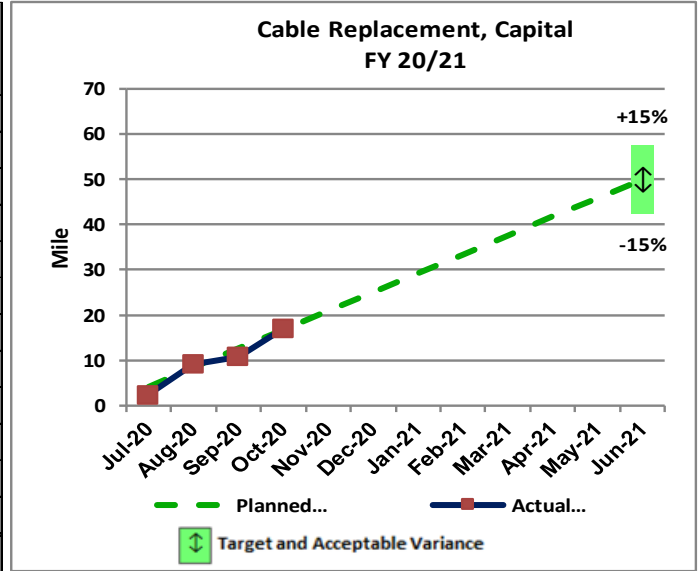
EQUITY CORE CATEGORY: Water & Power Infrastructure Investment

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

TARGET & ACCEPTABLE VARIANCE (FY 20/21): Target = 50 miles; Acceptable Variance = ±15%

**STATUS:** Within Acceptable Variance

FYTD as of:	Planned (Mile)	Actual (Mile)	Variance		Re-Estimate
			Mile	%	
Jul-20	4.2	2.4	-1.8	-42.9%	
Aug-20	8.4	9.2	0.8	9.5%	
Sep-20	12.6	10.8	-1.8	-14.3%	
Oct-20	16.8	17.0	0.2	1.2%	
Nov-20	21.0				21.0
Dec-20	25.0				25.0
Jan-21	29.2				29.2
Feb-21	33.4				33.4
Mar-21	37.6				37.6
Apr-21	41.8				41.8
May-21	46.0				46.0
Jun-21	50.0				50.0
<b>Acceptable Variance</b>			± 15%		0.0%



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

**1. NARRATIVE / BACKGROUND**

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

**2. CRITERIA**

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

**3. ACHIEVEMENTS**

- Through the month of October, Distribution Construction & Maintenance completed 17.0 circuit-miles. The goal is to complete 50 circuit-miles for Fiscal Year 20/21.

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

- Variance through the month of October is 0.2 circuit-mile, 1.2% above target. This is due to District crews closing the completed jobs in the system.

**5. MITIGATION/RECOMMENDATION**

- No mitigation plan at this point.

**6. OUTREACH STRATEGY / PLAN**

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

# LADWP EMDI - Customer Incentive Programs/Services

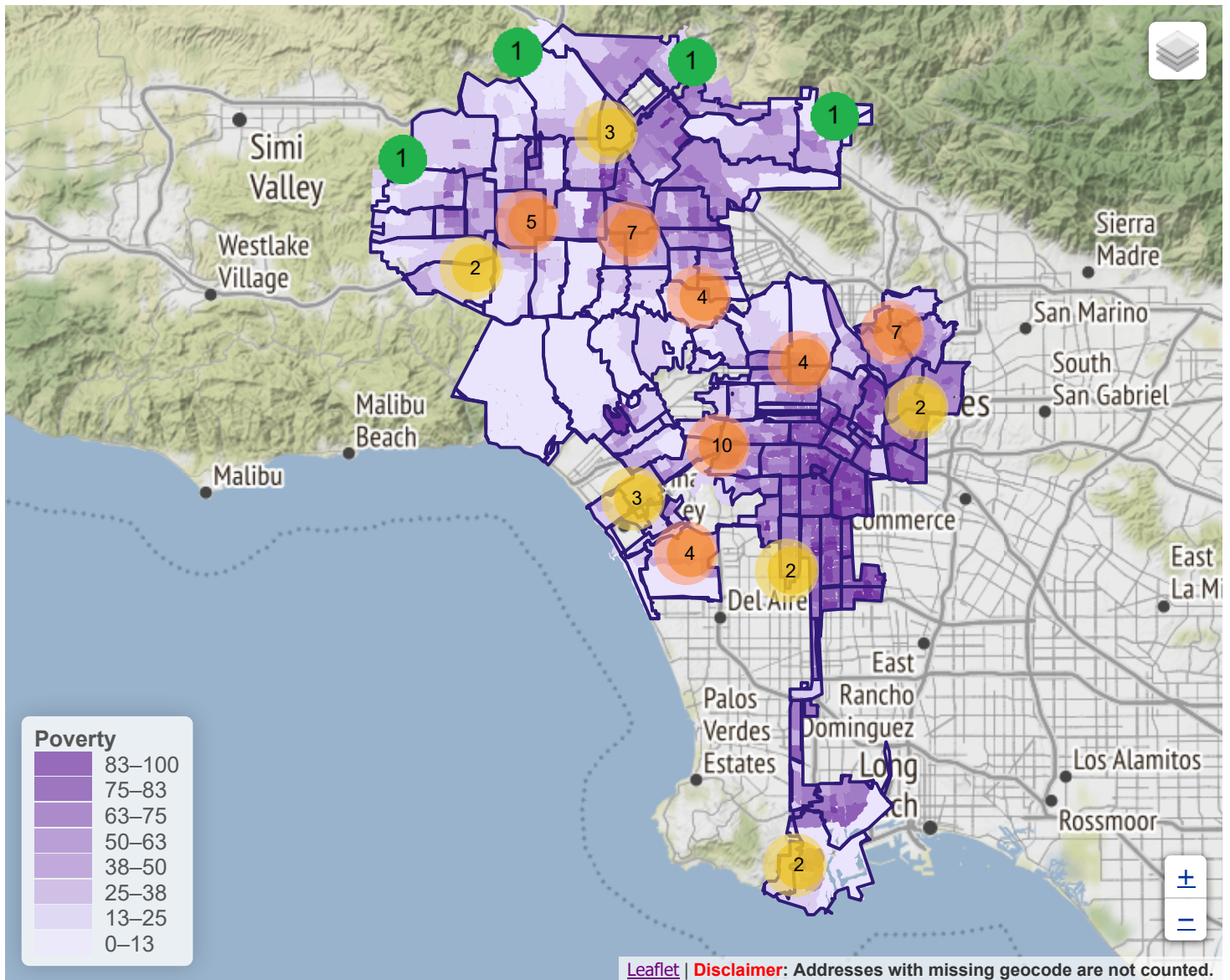
RESPONSIBLE MANAGER: Terrence McCarthy

(Reporting Period: May 2020 - Oct 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 *Terrence McCarthy*  
EQUITY CORE CATEGORY:

REPORTING PERIOD: May 2020 – October 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, capturing 150,000-acre ft/yr of stormwater, 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 87 rain barrels
  - Rebated 8 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, Turf Removal classes and Garden Design 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 Programs/Services

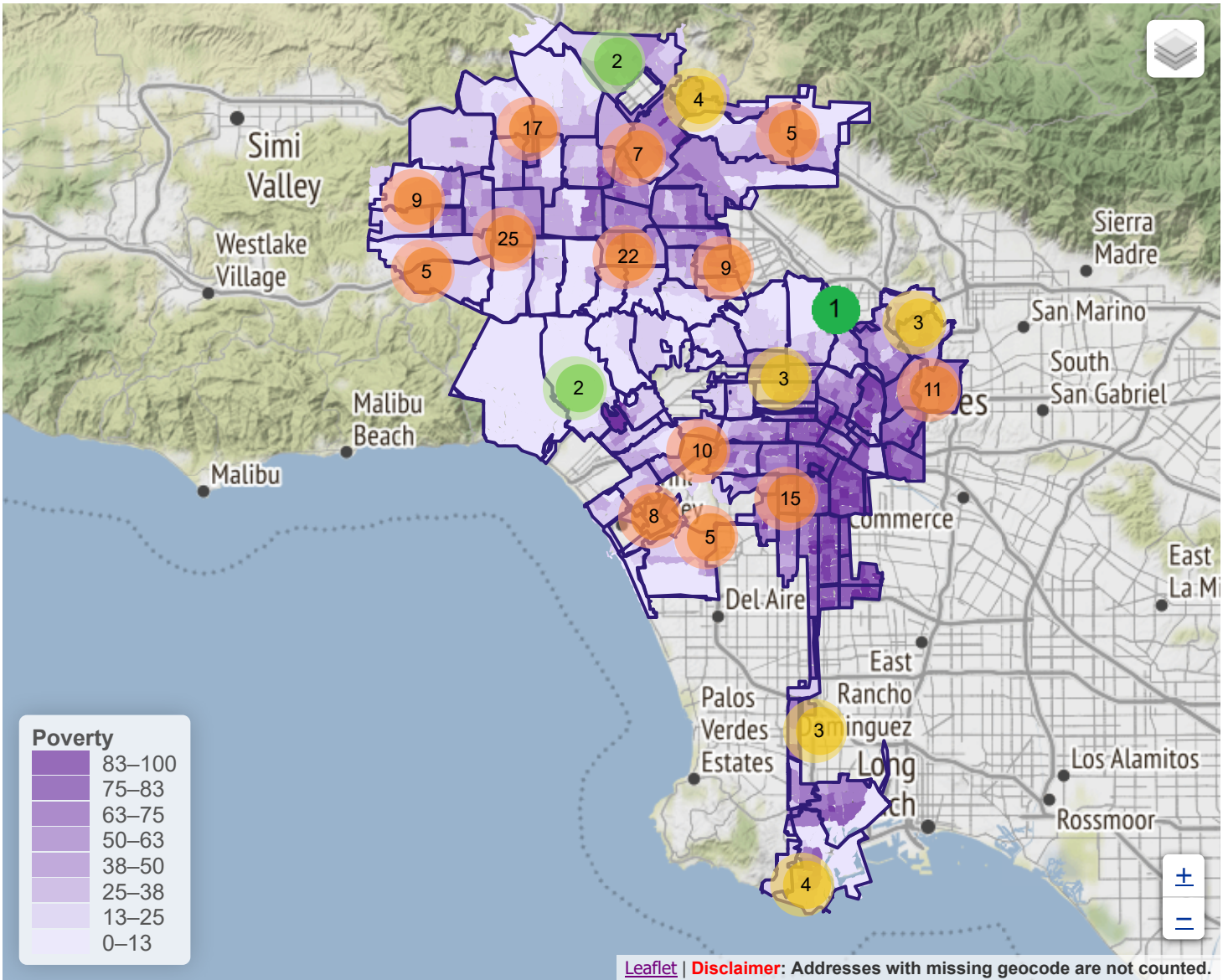
RESPONSIBLE MANAGER: Terrence McCarthy

(Reporting Period: May 2020 - Oct 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 rain water, customers are encouraged to create sustainable landscapes that maximize the benefits of the air, water and soil relationship. The program is a great way for customers to save money and, more importantly, save water.

The numbers shown on the map are the number of customers participating in the program by geographic area.



# LADWP EQUITY METRIC – *Turf Replacement Rebates (Water System)*

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

REPORTING PERIOD: May 2020 – October 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, capturing 150,000 acre ft/yr of stormwater, reducing per capita potable water use by 25% (GPCD) by 2035.

## 2. CRITERIA

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

## 3. ACHIEVEMENTS

- Residential Turf Replaced
  - 264,933 square feet of turf
- Commercial Turf Replaced
  - 10,596 square feet of turf

## 4. ISSUES

- None

## 5. OUTREACH STRATEGY / PLAN

- Despite the pandemic, LADWP has expanded workshops available to customers. In partnership with Metropolitan Water District, customers can virtually attend California Friendly Landscape Training (CFLT), Turf Removal workshops and Garden Design workshops. These series of workshops help customers gain the skills necessary to replace their turf with a sustainable California Friendly landscape.
- LADWP authorized an extension of its successful series of [Hands on Workshops \(HOWs\)](#) for an additional year. HOWs educate customers on how to remove turf, grade for rainwater capture, install low water use plants, and convert to efficient drip irrigation. HOWs will resume when social distancing is relaxed. In the meantime, customers can access the HOW curriculum via an online [workbook](#).
- LADWP is working to safely advance the Landscape Transformation Design Services program for customers. Social distancing measures are being considered that would allow LADWP and consultants to safely assess properties to provide a planting plan, irrigation plan, and a low water use plant list for customers at no cost.
- LADWP offers planting templates, individual plant profiles and virtual tours of sustainable landscaping through the [Lawn-to-Garden Transformation Section](#) of our website. This site provides customers with design suggestions and installation instructions.

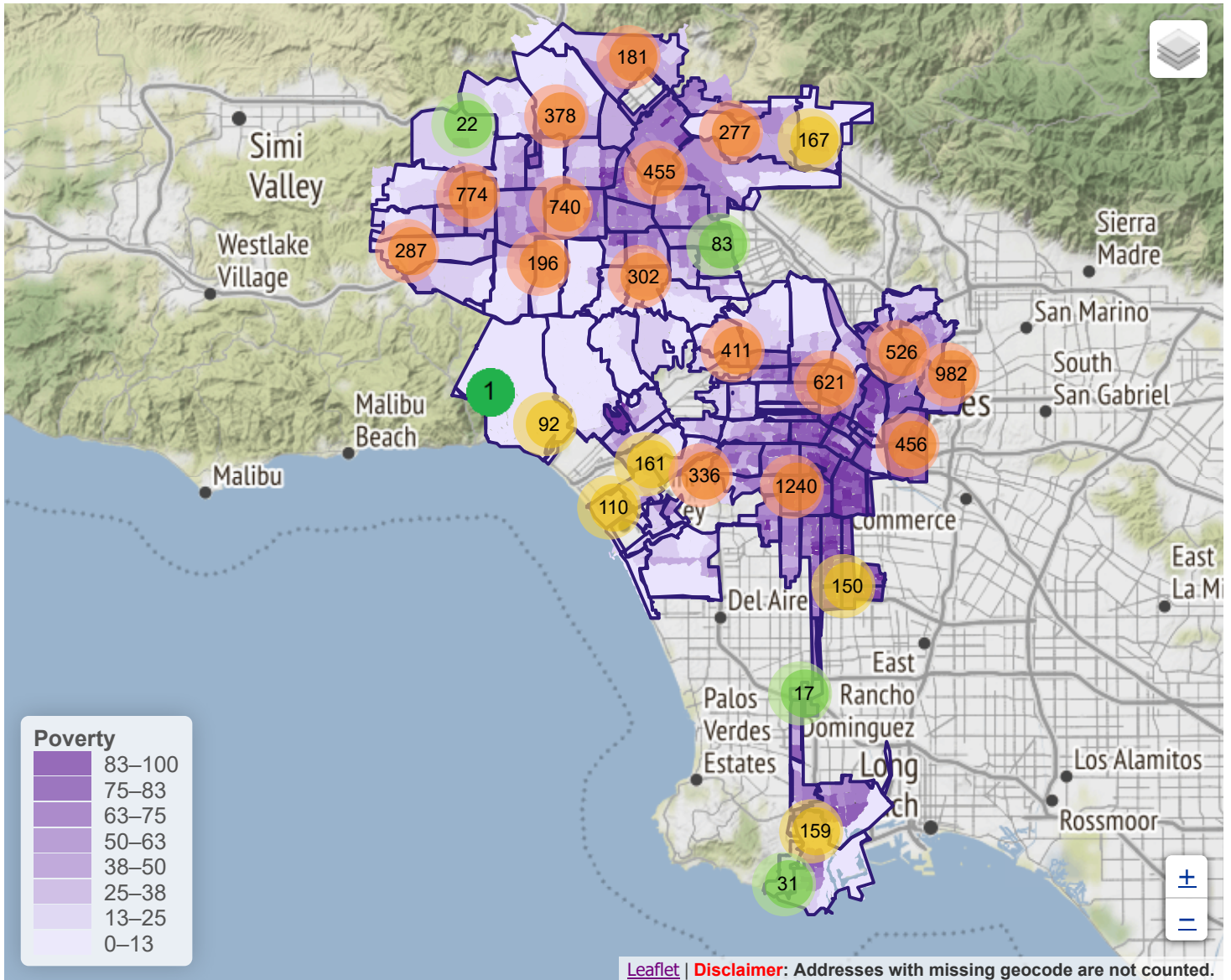
# LADWP EMDI - Customer Incentive Programs/Services

RESPONSIBLE MANAGER:Craig Tranby

(Reporting Period: May 2020 - Oct 2020)

## Tree Canopy Program

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



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

RESPONSIBLE MANAGER: Craig Tranby

REPORTING PERIOD: 5/20 – 10/20

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, 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. However, the COVID-19 pandemic slowed down progress for a few key spring months. Over 19,000 trees have been distributed/planted under the MOU through October.
- Program continues to leverage CalFire grants to fund watering, pavement cuts, and additional plantings.
- Energy savings of about 6 GWh annually continue to be achieved.

- Tree adoptions have been modified to curbside pick-up events during the pandemic and have now gained momentum.
- Mayor's office coordinated street tree campaign over the spring and summer resulted in >2,000 tree requests.

## 4. ISSUES

- Program was adjusted to accommodate social distancing and safety precautions, causing temporary delays in progress.
- 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 been focusing on low income communities in particular, a grassroots tree ambassador program is launching.

## 5. OUTREACH STRATEGY / PLAN

- Continue to use new co-branded collateral and materials with LADWP
- Coordination with LADWP efficiency programs, such as Home Energy Improvement Program, and outreach grantees
- Coordination with partners and elected offices
- Events converted to online events
- Website/Social Media
- Advertising
- Canvassing limited due to pandemic

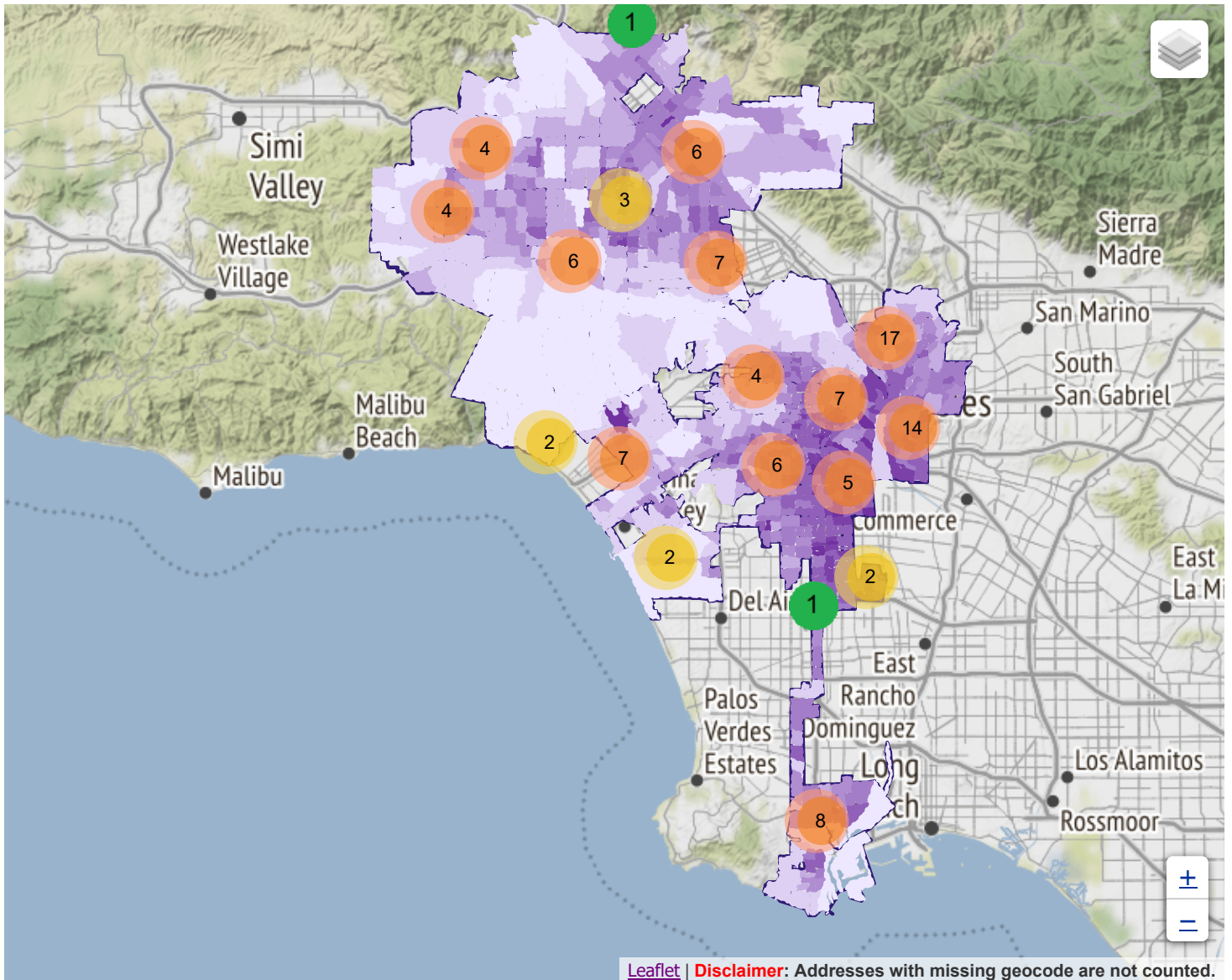
## LADWP EMDI - Customer Incentive Programs/Services

RESPONSIBLE MANAGER: Steven Starks

(Reporting Period: May 2020 - Oct 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: 05-01-20 through 10-31-20

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

***CDI has been suspended since March 2020 due to COVID-19 restrictions and zero customer interaction. Installations have been restricted to the vacant City of Los Angeles Recreation and Parks sites provided.***

### **FY 19/20 05-01-20 through 06-30-20**

- Savings 1,151,122 kWh
- Savings 178 kW
- Savings 0 HCF
- 52 businesses completed

### **FY 20/21 07-01-20 through 10-31-20**

- Savings 2,163,917 kWh
- Savings 240 kW
- Savings 0 HCF
- 67 businesses completed

### **Short Term Target:**

***The ramp up period may take 30 – 60 days provided skilled resources familiar with the program are reinstated. Currently a date to resume the program has not been set due to COVID-19 restrictions and zero customer interaction:***

1. Reinvigorate the program post Covid-19 by engaging the local Community Based Organizations (CBO) to canvas under served service territories.
2. Reinstate and rehire sub-contractors familiar with the program
3. Increase marketing and emphasize efforts toward the small business customers whom have been greatly impacted by the pandemic.

### **Mid-Term Target:**

1. Meet 50% of pre-Covid-19 participation. Prior to Covid-19 CDI installations were close to 800 completions per month. This could be achieved by enrolling more small businesses as well as targeting educational facilities outside of LAUSD (colleges, trade-schools, private schools, etc.)

### **Long-Term Target:**

***Provided short and mid-term targets are met, the long-term targets would be attainable seamlessly. A specific time frame is not possible to provide. When is contingent on the full reinstatement of CDI.***

1. Attain pre-Covid-19 participation of 800 or more installation per month.
2. By meeting this target, CDI could report energy savings in excess of an estimated 7.2M kWh per month.

#### 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 restrictions and zero customer interaction

#### 5. OUTREACH STRATEGY / PLAN

***Outreach to promote CDI has been severely impacted due to COVID-19 restrictions other than maintaining the program email in-box and compiling an interest notification list to contact customers once the program resumes.***

- Outbound Canvassing – ***Currently on hold;*** Existing Community Based Organizations (CBO) and other community organizations market the program and its availability to LADWP business customers
- Flyers – ***Distribution currently on hold;*** Program flyers are distributed via outbound canvassing, community events support, and any other appropriate outreach channel likely to build program awareness
- Website – ***Website is periodically refreshed with program status to keep interested businesses updated;*** Program information in English and Spanish is available on the LADWP website

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

RESPONSIBLE MANAGER: Steven Starks

REPORTING PERIOD: 05-01-20 through 10-31-20

EQUITY CORE CATEGORY: Customer Incentive Programs EQ KPI ID 8

## 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

***HEIP has been suspended since March 2020 due to COVID-19 restrictions and zero customer interaction.***

### **FY 19/20 05-01-20 through 06-30-20**

- Savings 0 kWh
- Savings 0 kW
- Savings 0 HCF
- 0 installations completed

### **FY 20/21 07-01-20 through 10-31-20**

- Savings 0 kWh
- Savings 0 kW
- Savings 0 HCF
- 0 installations completed

### **Short-Term Target:**

***The ramp up period may take 30 to 60 days provided skilled resources familiar with the program are reinstated. Currently a date to resume the program has not been set due to COVID-19 restrictions and zero customer interaction:***

1. Reinvigorate the program post Covid-19 by engaging the local Community Based Organizations (CBO) working with the Shared Solar Program to enroll more multi-family apartment building.
2. Increase marketing and emphasize efforts toward the multi-family dwellings, specifically apartment buildings.

### **Mid-Term Target:**

1. Show an increase of 25% of multi-residential dwellings. Prior to Covid-19 the efforts of focusing on multi-residential dwelling was at the beginning of establishment with the implementation of a separate HEIP application specially for multi-dwellings.
2. Increase the resources within Power, Construction, and Maintenance (PCM) Staff and the Utility Pre-Craft Trainees (UPCTs) to achieve the prospective targets.
3. Offer program participants Saturday appointments. However, this target is contingent on approval of PCM management.

### **Long-Term Target:**

1. Work with our internal IT section to create an online HEIP application for both targeted customers (single family dwellings and apartment building owners).
2. Attain and exceed pre-Covid-19 installation which average 200 homes per month of single residential dwellings as well as



showing significant increase in multi-residential dwellings.

3. By meeting the proposed mid and long-term targets, HEIP could report energy savings in excess of an estimated 4.5M kWh annually.

#### 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

***Outreach to promote HEIP has been severely impacted due to COVID-19 restrictions other than maintaining the program Hotline and email in-box and compiling an interest notification list to contact customers when the program resumes.***

- Direct Mail – ***Currently on hold;*** Mail batches are created according to council districts and zip codes and delivered to our vendor for mailing
- Flyers – ***Distribution currently on hold;*** Program flyers are distributed via direct mail, utilized for community events support, and any other appropriate outreach channel likely to build program awareness
- Website – ***Website is periodically refreshed with program status to keep interested customers updated;*** Program

information is in English and Spanish, including both HEIP and HEIP Multi-Residential Applications are available on the LADWP website

- Program Outreach & Community Partnership Program – ***Currently on hold;*** Some of the grantees that participate in the POC program provide services to hard-to-reach customers that help them participate in the program

# LADWP EQUITY METRIC – Refrigerator Exchange Program (Joint)

RESPONSIBLE MANAGER: Steven Starks

REPORTING PERIOD: FY 19-20 (5/20 to 10/20)

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 October 31, 2020, there were approximately 215,652 customers who are receiving services on a qualifying rate schedule (low income or lifeline) who may have qualifying units.

## 3. GOALS AND PROGRESS

### PROGRAM IS CURRENTLY SUSPENDED DUE TO THE CORONAVIRUS PANEMIC)

- Since program inception, May 1, 2007 to October 31, 2020, a total of 134,443 refrigerators were exchanged for a savings of 108,198,884 kWh.
- On January 13, 2020 LADWP finalized a SCPA 5-year agreement, extending this program until 2024.
- Short Term 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 by CMCA, 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.
- Short Term Goal: Restart Program and Initiate 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.
- Mid-Term Goal: Work collaboratively with Vendor to identify potential qualifying customers, 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.
  - **Although the program remains suspended, 7 facilities totaling 347 units have been pre-qualified.**
- Long Term Goal: Exchange 8,165 annually, once program has been restarted.
  - Progress: Program was suspended on March 19, 2020 and remains suspended. (due to concerns regarding the spread of COVID 19)
  - **Although the program remains suspended, 342 customers were prequalified prior to suspension and 454 customers have been qualified since.**

#### 4. **BARRIERS/ISSUES**

- COVID19 - Program was suspended March 19, 2020 and remains suspended. 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** **(ALL OUTREACH HAS BEEN SUSPENDED UNTIL PROGRAM IS RESTARTED)**

- 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

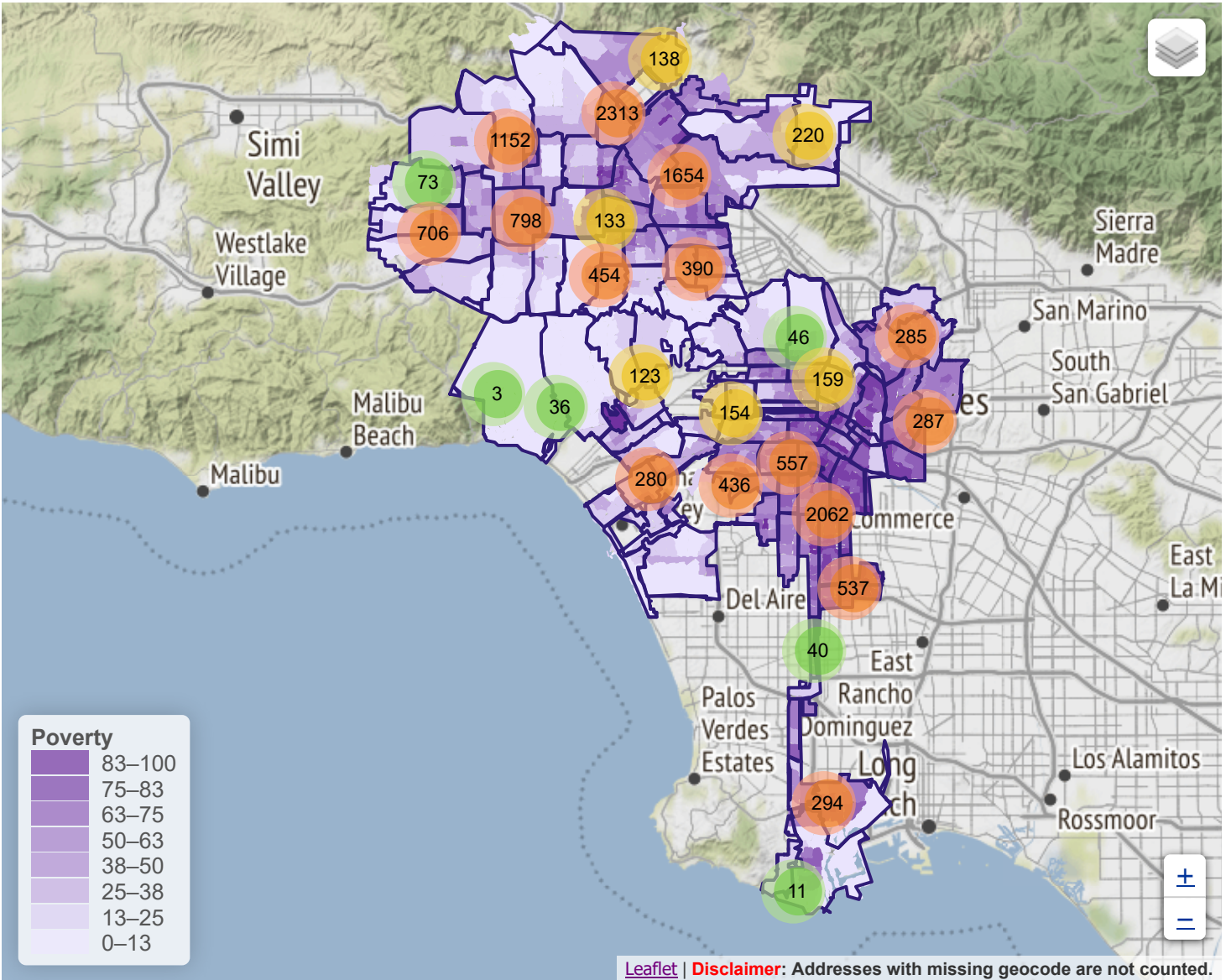
# LADWP EMDI - Customer Incentive Programs/Services

RESPONSIBLE MANAGER:Victoria Black

(Reporting Period: May 2020 - Oct 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: 5-1-20 – 10-31-20

## 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

### Immediate Goals

**Goal:** Encourage the use of energy efficient options for certain home improvements, such as Attic Insulation. By keeping the program active and incentive levels static during the current economic situation, we experienced a slight increase in rebate payments which we expect to continue.

**Progress:** For the reporting period, the program has exceeded the projected participation, budget, and energy savings goals

**Progress:** Paid 13,402 rebates with energy savings of 5.586 GWh in current reporting period (05-01-20 through 10-31-20)

**Challenges/Barriers:** Reporting restrictions due to COVID-19 may continue to have an adverse effect.

**Goal:** Maintain production at 95% to 105% percent of pre-COVID 19 levels through execution of the CRU Telecommuting Plan.

**Progress:** Continue to monitor and assess production capabilities while adhering to the Telecommuting plan implemented last reporting period.

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

**Challenges/Barriers:** Due to limited staff resources, risk of staff burnout due to the high number of incoming applications and our higher than normal processing goals

### Mid-Range Goals.

**Goal:** Increase staffing to meet sustained customer demand and ensure rebate processing and payments to residential customers, in a timely and efficient manner.

**Progress:** Offers made and accepted on October 20<sup>th</sup>, 2020 and they are scheduled to start on November 9, 2020..

**Progress:** October 26<sup>th</sup>, 2020 submitted draft of Emergency Appointment Memo for 4 USS-C's and Screening Device to ASO. With an expectation of selecting eligible candidates by December 2020.

**Challenges/Barriers:** Due to reliance on other units to move the process along the current timelessness have been extended.

### Long Term Goals.

**Goal:** Increase awareness of equity to disadvantaged communities through Consumer Rebate Program offerings. We project total participation in the program to be 25,000 applications with income qualified customer participation rate of 14%.

**Progress:** For current reporting period overall program participation was 21,934 applications.

Of that total 12% were low income/lifeline customers.

**Challenges/Barriers:** Lack of adequate staffing limits our ability to pursue progress towards this goal.

**Goal:** Create a seamless customer service experience for customer inquiry and participation across the primary customer support channels.

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

**Challenges/Barriers:** Program Support team continues to deal with staffing shortages and lack of dedicated positions leading to high turnover which creates gaps and loss of institutional knowledge which affects the customer experience.

**Goal:** Complete the manuals of standard practice and visual sample application packages for the two remaining measures: Whole House Fan and Windows.

**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

**Challenges/Barriers:** Lack of adequate staffing limits our ability to pursue progress towards this goal.

**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 3/1/2021.

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

**Challenges/Barriers:** Lack of adequate staffing limits our ability to pursue progress towards this goal.

#### 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
- Partner with Public Affairs and Customer Service to develop 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 EQUITY METRIC – *Electric Vehicle Infrastructure (Power)*

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

REPORTING PERIOD: October 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 the Los Angeles Department of Water and Power's (LADWP) 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 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 Q4 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 \$4,000 per installed charger for up to 40 chargers per property. Starting Q4 2020, LADWP will offer an additional \$1,000 rebate per Level 2 charging stations installed in Disadvantaged Communities in order to increase access to charging in these underserved communities. This applies to public, workplace, and MUDs. 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 which are designated as disadvantaged communities are given greater priority where possible.

### 3. **ACHIEVEMENTS**

Charger Installations\*:

FYTD as of:	Target	Actual	Variance		Re- Estimate
			Unit	%	
20-Jul	300	246	-54	-18%	
20-Aug	600	652	52	9%	
20-Sep	900	934	34	4%	
20-Oct	1200	1439	239	20%	
20-Nov	1500				
20-Dec	1800				
21-Jan	2100				
21-Feb	2400				
21-Mar	2700				
21-Apr	3000				
21-May	3300				
21-Jun	3600				

\*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
20-Jul	43	0	230	273
20-Aug	81	95	541	717
20-Sep	204	95	818	1117
20-Oct	204	267	1138	1609
20-Nov				
20-Dec				
21-Jan				
21-Feb				
21-Mar				
21-Apr				
21-May				
21-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 was in development to be launched in July 2020. However, this has been postponed to the 3<sup>rd</sup> quarter of calendar year 2021. In addition, new upgrades to website content and flow for customer ease of use are in development for December 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. Additionally LADWP is working on revising the program to have a rebate adder of \$1,000 for customers that are currently on the low income rate.

### 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 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.

- 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](http://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 Q4 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 increase to the incentive amount for installing a dedicated meter.

# LADWP EMDI - Customer Incentive Programs/Services

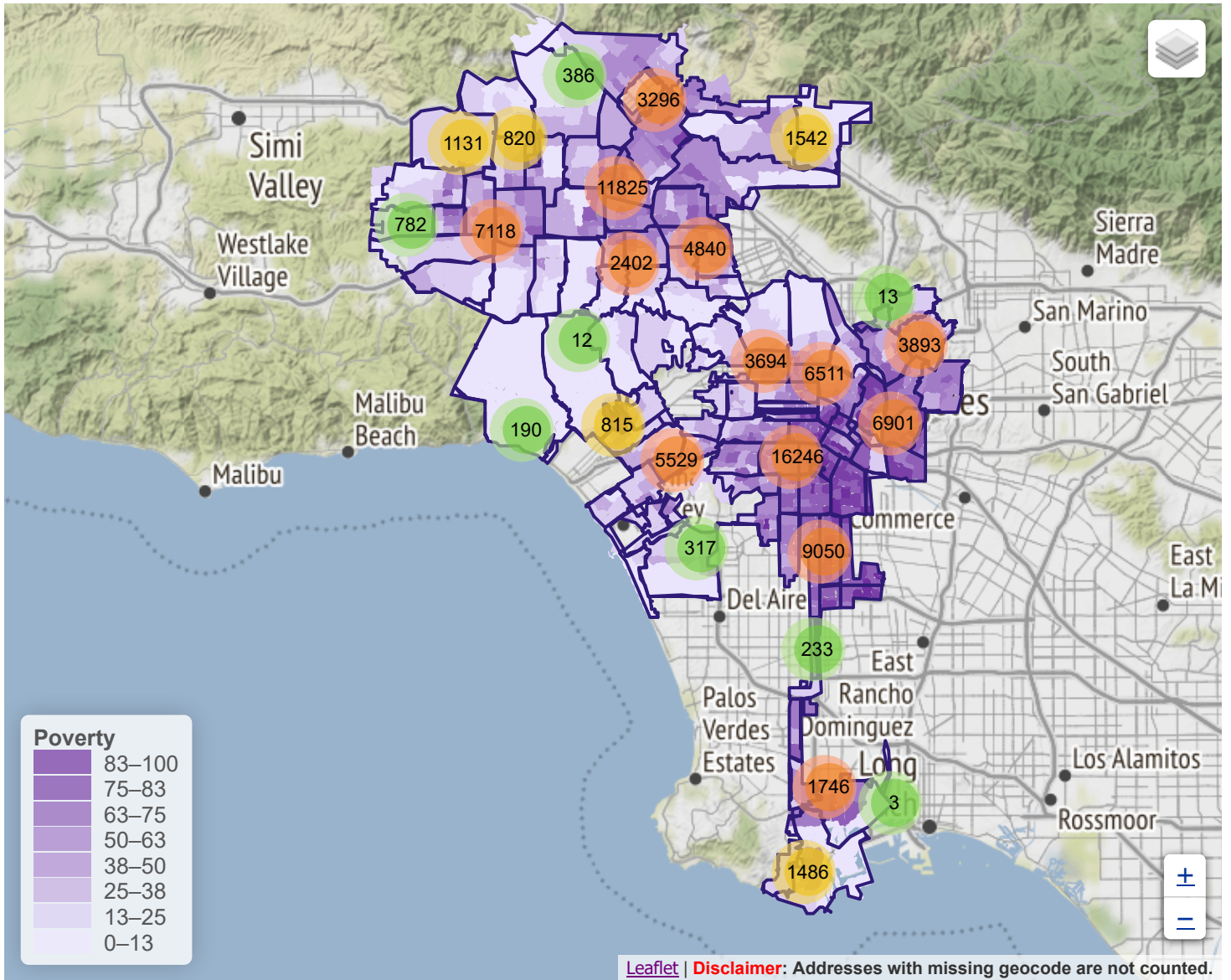
RESPONSIBLE MANAGER: Kathleen Wright

(Reporting Period: Oct 2020 - Oct 2020)

## Lifeline Discount Program

**Lifeline Program:** Customers who are 62 years of age or older or permanently disabled may qualify, based solely on their income, to have a discount applied to their electric and/or water bills based on their income and household size.

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: Gerren Edwards – Assistant Director, Billing  
EQUITY CORE CATEGORY:

REPORTING PERIOD: FY 2020-2021

## 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 are exempted from paying the Utility Users Tax (UUT) and 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 2020, there are approximately 94,742 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

- No Online application submission process
- Limited visibility into customer application submittals, which are managed by the Office of Finance, until they are approved

## 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

## LADWP EMDI - Customer Incentive Programs/Services

RESPONSIBLE MANAGER: Kathleen Wright

(Reporting Period: Oct 2020 - Oct 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.

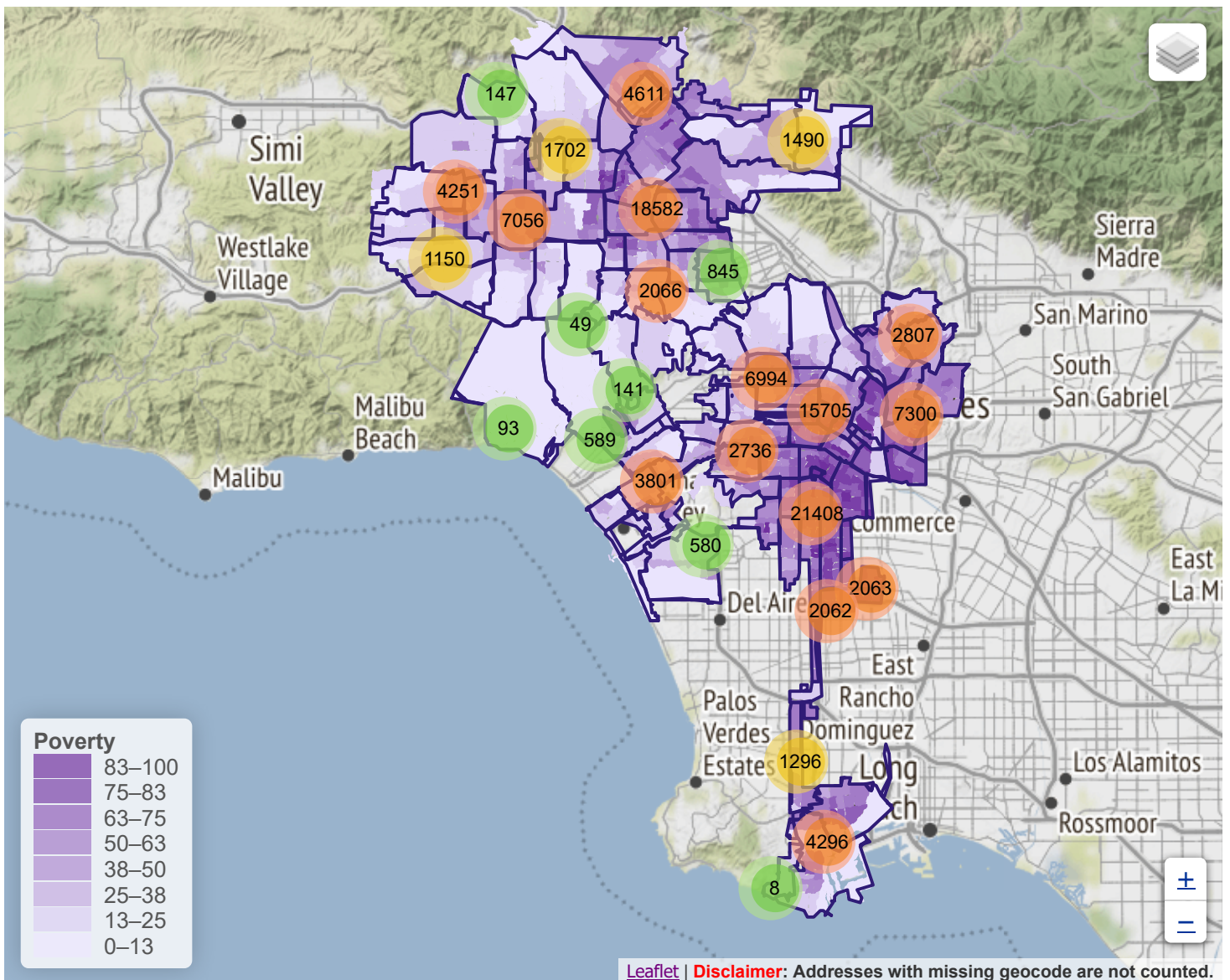
The numbers shown on the map are the number of commercial customers participating in the program by geographic area.

Household Income Requirements Effective July 1, 2020

**Members in Household Maximum Annual Gross Income\***

1	\$33,820
2	\$33,820
3	\$42,660
4	\$51,500
5	\$60,340
6	\$69,180
7	\$78,860
8	\$86,860

Each additional member: Add \$8,840 to income



# LADWP EQUITY METRIC – *Low Income Discount Metric*

RESPONSIBLE MANAGER: Gerren Edwards – Assistant Director, Billing  
EQUITY CORE CATEGORY:

REPORTING PERIOD: FY 2020-2021

## 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	\$34,480
3	\$43,440
4	\$52,400
5	\$61,360
6	\$70,320
7	\$79,280
8	\$88,240
Each Additional Person	\$8,960
* Effective July 1, 2020 to June 30, 2021	

## 3. GOALS

- Increase customer enrollment in the program by 10%.

## 4. ACHIEVEMENTS

- As of October 2020, there are approximately 117,648 participants enrolled in the program, which is a 3.38% difference from the start of the fiscal year. Participant number trends go up and down due to waves in recertification.
- Online and Fax applications have been partially automated.
- As of October 2020, applications have been processed within 2 business days of receipt.

## 5. ISSUES

- Mail in applications have a longer processing duration.
- Application submission tracking needs to be updated.
- Minimal outreach efforts by LADWP to customers, just generic pamphlets and online information.
- No targeted communications to customers.
- No formal engagement with community-based organizations.
- Reduction in customers recertifying for the program.

## 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: Jan 2020 - Oct 2020)

**LADWP's SBE/DVBE Program**

Commitment percentages based on Board-awarded contracts that had SBE/DVBE participation requirements.

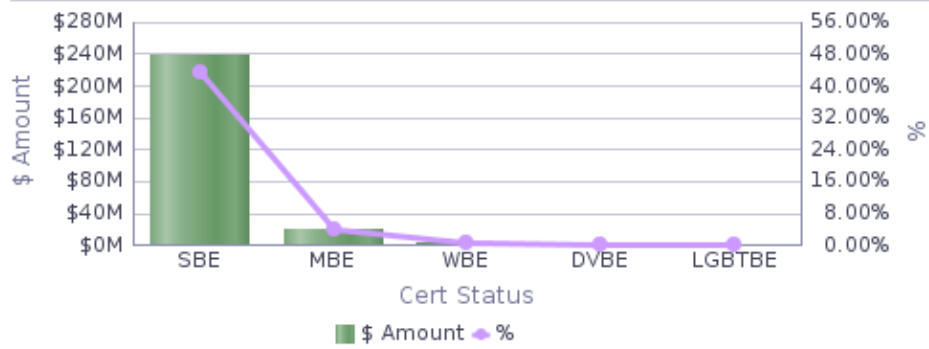
Firms with multiple certifications are counted in each category in which they were certified.

**PARTICIPATION COMMITMENTS (Contracts with Mandatory SBE/DVBE Requirements)\***

Year	Month	SBE		MBE		WBE		DVBE		LGBTBE		TOTAL	
		\$ Amount	%	\$ Amount	%	\$ Amount	%	\$ Amount	%	\$ Amount	%	\$ Amount	%
2020	Oct	237,072,004	43.65	20,986,941	3.86	3,616,866	0.67	500,000	0.09	0	0.00	543,134,614	100.00

**Contract Participation Commitments**

Cert Status	\$ Amount	%
<b>SBE</b>	237,072,004	43.65%
<b>MBE</b>	20,986,941	3.86%
<b>WBE</b>	3,616,866	0.67%
<b>DVBE</b>	500,000	0.09%
<b>LGBTBE</b>	0	0.00%





# LADWP EQUITY METRIC – *Contract Participation (Joint)*

RESPONSIBLE MANAGER: Karyn Son  
EQUITY CORE CATEGORY: Procurement

REPORTING PERIOD: May 2020– October 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 \$150,000.

## 2. CRITERIA

Mandatory SBE/DVBE participation requirements are set on 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 2020 through October 2020:
  - SBE 43.6%
  - MBE 3.9%
  - WBE 0.7%
  - DVBE 0.1%
- LADWP partnered 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 consisted of 3 webinars that was presented over the course of the 2020 summer.

- Participated in 11 virtual outreach events.

## 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 restricted participation and hosting of in-person networking and outreach events.

## 5. OUTREACH STRATEGY / PLAN

LADWP will continue with its outreach efforts to reach out to small and diverse businesses through various virtual platforms as well as targeted groups.

- In lieu of the traditional LA Small Business Academy typically held in a classroom setting, a new program titled “Lighting the Way” will be implemented to provide education and guidance to small businesses through a series of educational videos covering a full range of topics related to contracting with LADWP and the City. Without the space limitation of a classroom, this effort will provide greater accessibility to a larger audience.
- Host a project-specific outreach event centered around an upcoming Power System procurement opportunity to encourage additional interest and facilitate networking in advance of the solicitation.
- Partner with various advocacy groups for targeted outreach.

**LADWP EMDI - Employment**

RESPONSIBLE MANAGER:Shannon Pascual

(Reporting Period: May 2020 - Oct 2020)

**New Hires/Promotions Demographic Composition**

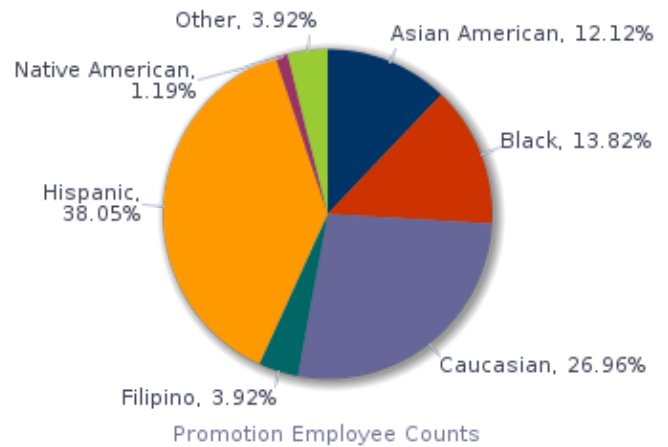
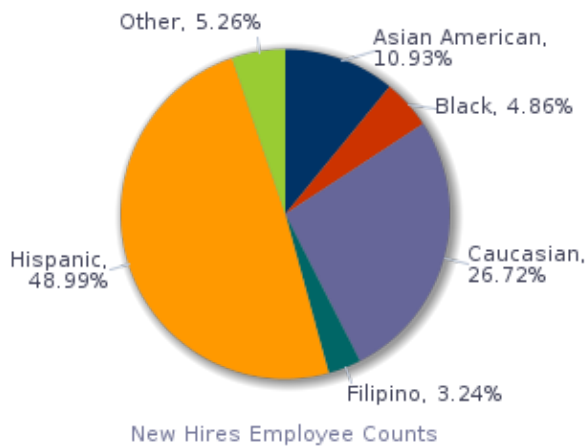
Hiring and Promotions by Ethnic Group

Ethnic Group	New Hires		Promotion	
	Female	Male	Female	Male
Asian American	10	17	19	52
Black		12	42	39
Caucasian	6	60	22	136
Filipino	3	5	9	14
Hispanic	4	117	48	175
Native American			3	4
Other	3	10	9	14
<b>Grand Total</b>	<b>26</b>	<b>221</b>	<b>152</b>	<b>434</b>

Hiring and Promotions by Gender

Gender	New Hires	Promotion
Female	26	152
Male	221	434
<b>Grand Total</b>	<b>247</b>	<b>586</b>

**Hiring and Promotions by Ethnic Group**



**Hiring and Promotions by Gender**

