

LA100 Bi-Annual Report Card

October 11, 2024



Agenda

Overview

- Key Progress on LA100 Planning & Implementation
- Distributed Energy Resources
- Renewables and Energy Storage
- Transmission Development
- Generation Station Modernization
- Power System Reliability Program
- Electrification
- Distribution System

Key Progress Updates

LA100 Planning & Implementation (1/3)

- 1 Eland 1 Solar is near commercial operation, partnering with Glendale Water and Power, providing 200 MW of Solar energy, coupled with 150 MW/4hr of Tesla batteries. In addition, construction of Eland 2 Solar has commenced and will be commissioned in the first quarter of 2025, bringing online 200 MW of solar, coupled with 150MW/4hr battery.
- The Intermountain Power Project (IPP) Renewed Project, 840 MW of green hydrogen ready combined cycle units, is on track for commercial operation by 2025, providing cleaner electricity and replacing 1,900 MW of LADWP's last coal-fired generating units.

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LADWP has successfully applied to more than **\$4 Billion** in grants and was **awarded more than \$59M**, with an additional **\$150M in negotiations**.



Key Progress Updates

LA100 Planning & Implementation (2/3)

4

Recently launched the **Demand Side Grid Support Program** under CEC guidelines, which **offers incentives** to electric customers, who reduce load and provide backup generation with a goal of encouraging more **behind-the-meter energy storage adoption** for both existing and new solar customers.

5

Cool LA Initiative launched in 2022, offering customers on an income qualified rate a \$225 instant rebate for room air conditioners. The program had over 7,614 participants and has paid out over \$2.2 million in incentives. Given out 856 units to low-income customers.

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Achieved total **local solar** of **approx. 748 MW.** Target of 926 MW by 2025, 1500 MW by 2030, and 2220 MW by 2035.



Key Progress Updates

LA100 Planning & Implementation (3/3)

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The **2024 SLTRP** is **targeting a carbon-free grid by 2035**. Five Advisory Group meetings have been held and modeling is underway with advanced modeling software and compiling critical input assumptions. The SLTRP will **evaluate risk variables** and **optimize our integrated resource** plan to account for these diverse scenarios.

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LA100 Equity Strategies Implementation Phase began in March 2024 by adding the Equity Strategies Advisory Committee as stakeholders to the 2024 SLTRP and including equity and energy burden as considerations for SLTRP analysis. Equity Strategies Advisory Committee is **developing equity criteria and metrics** for evaluation of DWP projects and programs and providing input into the **near-term action plan** to be finalized in Spring 2025.

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LADWP is integrating **Climate Vulnerability Assessments and Adaptation** strategies into its long-term plan, by analyzing data, conducting assessments, and developing targeted programs.



Distributed Energy Resources

- Customer programs have introduced <u>new</u> building electrification offerings in the Consumer Rebate, LADWP Zero By Design and Business Offerings for Sustainable Solutions (BOSS) Programs. Additionally, customer programs have **increased energy efficiency** and **building electrification** offerings across all customer segments including low income and DAC customers.
- Currently evaluating proposals from an RFP to **expand residential, commercial** and **industrial Demand Response portfolio** thru managed EV charging, Building Energy Management Systems, etc.
- Recently launched the **Demand Side Grid Support Program** under CEC guidelines, which **offers incentives** to electric customers, who reduce load and provide backup generation with a goal of encouraging more **behind-the-meter energy storage adoption** for both existing and new solar customers.
- Energy efficiency adoption is on track with LA100 projections. Current forecasts show LADWP is on track to achieve 350 GWh or more each year contingent on IHRP staffing allocations.



DER & DR Customer Programs

Feed-in Tariff NEM

660 MW SIP: 280 MW (FiT)

111 MW In-Service

FiT+ Pilot 10 MW Goal **VNEM** Pilot

> 5 MW Goal

Solar Rooftops Program

> 120 kW In-Service

Shared Solar Program

> 10 MW Goal

CES2G Pilot Program

> 20 MW Goal

C&I DR

38 MW w/78 **Participants** SGIP

\$82M for **PV+ BESS** or BESS

DSGS

119 Batteries >1 MW peak reduction

Power Savers

> 41 MW Across 59K **Thermostats**







2022

Power Strategic Long-Term Resource



Renewables & Energy Storage

2022 SLTRP Targets of:

- 80% by 2030 & 100% by 2035.
- 2023 Power Content Label (PCL):
 - 39.5% RPS or 57.3% clean energy
 - 46.7% RPS (Forecast for 2024)

Renewable Projects:

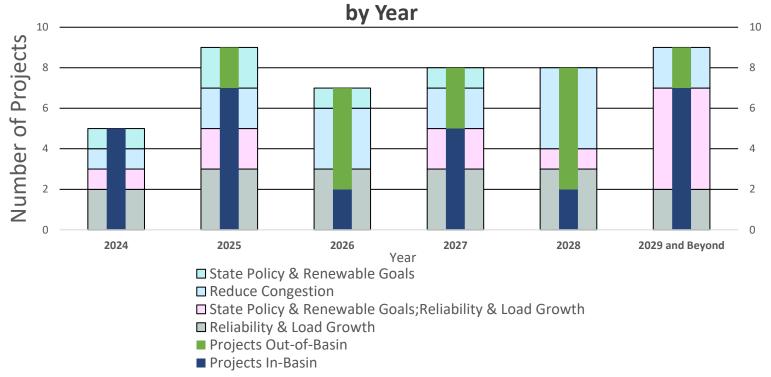
 More than 25 utility-scale projects are currently operational spanning seven Western States. Multiple potential projects in pipeline.

Energy Storage:

- Currently, 1,336 MW of energy storage operates across the Power System, with 39.57MW behind-the-meter (BTM) in-basin systems.
- An additional 8 MW of BTM is estimated to be deployed by 2025.

Transmission Development





- Existing Transmission projects include Overhead, Underground and Station work
- Projects are needed for Reliability, State Policy, Renewable goals and load growth
- Additional projects are expected to be developed to meet LA100 goals





Generation Station Modernization

Valley, Haynes, Intermountain, & Scattergood Modernization

	Project Name	Est. Completion	Project Phase
1	Valley GS Unit 1-4 & Stack Demolition	November 2026	Demolition/ Construction
2	Haynes GS Unit 8 Cooling System Retrofit	May 29, 2029	RFP Development
3	Intermountain Power Project (IPP) Renewed	June 30, 2025	Site Prep/Design
4	Scattergood GS Units 1 &2 Green Hydrogen Ready Modernization	December 2029	Enviro Permitting/RFP Dev.
5	Harbor Generating Station Unit 5 Cooling System Retrofit	Dec 31, 2029	ED4 Process

PSRP Metrics

Power System Reliability Program (PSRP)

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Reliability Metrics (as of 6/30/24):

- **SAIFI** (system frequency): 0.64 interruptions DWP target : 0.78
- **SAIDI** (system duration): 109.28 minutes DWP target : 95
- **CAIDI** (customer duration): 170.75 minutes DWP target : 165

2

3

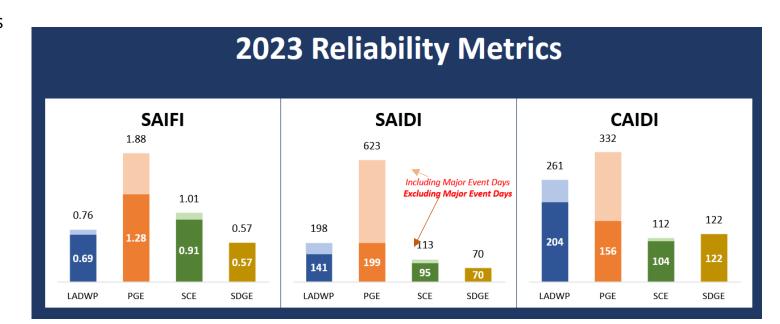
Asset Replacement (as of 6/30/24):

- **Poles**: 2,931 (3,700 target)
- **Crossarms**: 10,947 (12,600 target)
- **Transformers**: 1,305 (1,255 target)
- Cables: 60.4 miles (60 miles target)

Budget (as of 6/30/24):

\$1375 million for all PSRP work:

- \$747 million on **Capital jobs** (\$838M target)
- \$628 million on **O&M jobs** (\$605M target)



System Resiliency

As LADWP progresses toward 100% carbon free goal, it cannot sacrifice reliability and resilience but will need to bolster it. Our customers are increasingly reliant on LADWP as they transition off natural gas and gasoline. A successful transition to 100% carbon free energy system is the one where LADWP is reliable and resilient.



Heat Storm (9/5/24 – 9/11/24)

- After action plan
- Incident command center



Port of Los Angeles

- Near-term and long-term grid improvements
- Partner with Terminal Operators for upgrades on both sides
- Electrification and system expansion plans



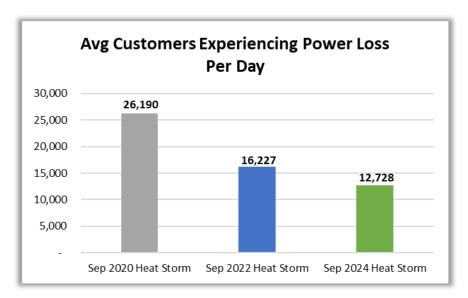
Critical Customers

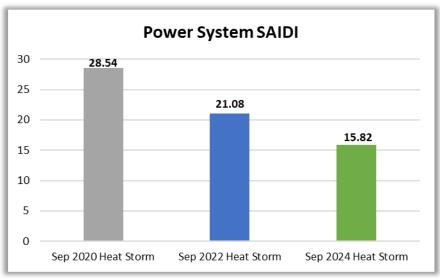
• Developing options for equipment upgrades and redundancy



Distribution Transformers

• Continue to target upgrades and replacements





EVs and charging stations have **exceeded**LADWP goals and the LA100 study scenarios projected high electrification to ensure low rates. New goals have been established to align with consumer demand, industry projections, state goals and distribution system infrastructure improvements.
LADWP is developing two new EV Hubs to better serve the community. The first is located at Van Nuys Plaza (14531 Lanark St.)and the second at Normandie Plaza (18120 Normandie Ave), with both scheduled to be operational by February 2026.

Commercial EV Charging Targets:

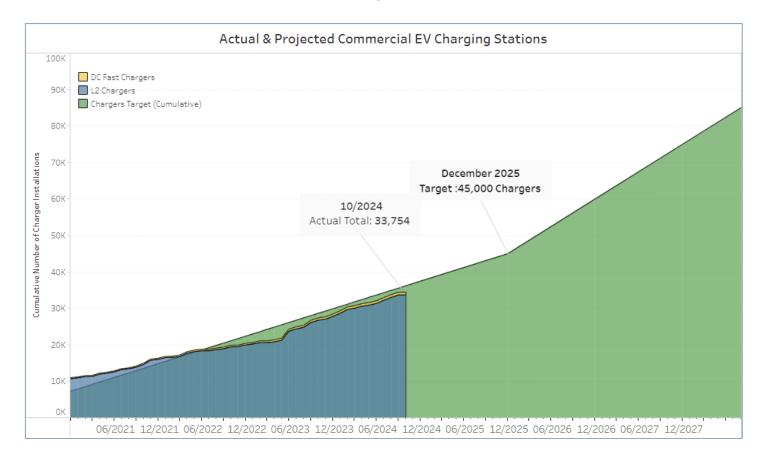
- 45,000 charging stations by 2025 including 1,000 DC Fast Chargers
 (33,051 as of 10/2024)
- 120,000 charging stations by 2030 including 3,000 DC Fast Chargers

City of LA EV Adoption Targets:

- 250,000 Light Duty EVs by 2025 (176,852 as of 6/2024)
- 550,000 Light Duty EVs by 2028
- 750,000 Light Duty EVs by 2030

Electrification

Exceeding Electric Vehicle Goals





^{*}previous goal was 25,000 charging stations by 2025, which LADWP surpassed

Impacts on Electrical Distribution System

Tens of substations and hundreds of circuits will exceed their existing capacity. LADWP will need to modernize the distribution system and execute numerous large electrical distribution infrastructure upgrade projects inside the substations and in many neighborhoods with the goal of expanding the distribution system capacity by 800 MW by 2035.

Drivers for large infrastructure projects

- Light duty and commercial EV adoption and charging infrastructure targets
- Electrification goals and large capital projects from city agencies such as Port of LA, LA World Airport, LADWP Water System and LA Sanitation.
- Local Distributed Energy Resources (such as Solar and Energy Storage) adoption targets

