LADWP Strategic Plan, Priorities, and Vision

David H. Wright
OPA Candidate Selection Committee
December 13, 2017
About LADWP

- Nation’s largest municipal utility
- 1.5 million electric customers and 681,000 water customers
- $5.5 B budget for water, power and joint services in FY 2017/18
- 100-plus years in business
- Guided by five-member Board appointed by Mayor and confirmed by City Council
- 9,000 employees strong

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LADWP is transforming our power supply to achieve a clean energy future for Los Angeles through major investments in:

- Coal Transition
- Renewable Energy
- Energy Efficiency
- Power Reliability
- Electric Transportation
- Battery Storage
Sustainable Water Supply

From five-year drought to near-record snowpack, our water supply is unpredictable—so we must reduce dependence on imported water and expand local water resources.

**Strategies:**
- Water Conservation
- Water Recycling
- Stormwater Capture
- Groundwater Cleanup

**Goals:**
- Reduce GPCD 25% by 2035 (Met goal of 20% by 2017)
- Increase local water resources to 50% of supply by 2035

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Our Accomplishments: Infrastructure

In FY 2016-2017:

✓ 184,000 feet of pipe replaced > annual FY 16-17 goal
✓ 2,656 power poles replaced > annual FY 16-17 goal
Our Accomplishments: Water Reliability

Mainline Replacement and Leak Rate

Cumulative Miles Replaced

Number of Annual Leaks

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Our Accomplishments:
Water Sustainability

• Achieved 20% water use reduction with each LA resident using only 104 gallons per day
• Local water supply development: We continue to work towards the expansion of recycled water use, stormwater capture, and groundwater replenishment.
• Removed 651,611 sq. ft. of turf in 92 of our own facilities, saving over 44.2 million gallons of water annually
• In FY 16-17, replaced 14,500 ft. of trunk lines and 184,000 ft. of mains
Our Accomplishments: Power Reliability

Fact: LADWP customers have a probability of experiencing less than 1 outage per year, and if they do, it lasts for less than 100 minutes.

Outage Frequency

Outage Duration

PRP initiated severe windstorm
November/December 2011
Our Accomplishments: Clean Energy

- Reduced GHG emissions by 42% – 14 years ahead of state legislation
- Achieved 29% renewable energy – up from 7% in 2006
- Achieved 961 MW of large-scale solar power
- Achieved 240 MW customer solar (Top 5 in U.S.)
- Achieved 1,116 MW wind and geothermal power
- Divested of Navajo coal power plant; expect to achieve 0 coal by 2025
- Added 1,000 MW transmission to access renewables
Our Accomplishments: Customer Service

Customer Service

✓ Released the Customer Bill of Rights
✓ Call Wait Times < 3 mins.
✓ Resolution of Class Action
✓ 95% Satisfaction Rating in Customer Service Centers
✓ Customer Journey Mapping
Our Accomplishments: Rates

Competitive Rates in 2017
How L.A. Water & Power Residential Bills Compare to Other California Cities*

<table>
<thead>
<tr>
<th>City</th>
<th>Combined Average Monthly Bill</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burbank</td>
<td>$124.88</td>
</tr>
<tr>
<td>Pasadena</td>
<td>$126.61</td>
</tr>
<tr>
<td>LADWP</td>
<td>$130.88</td>
</tr>
<tr>
<td>Santa Monica</td>
<td>$130.91</td>
</tr>
<tr>
<td>Long Beach</td>
<td>$142.59</td>
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<tr>
<td>Glendale</td>
<td>$143.60</td>
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<tr>
<td>Arcadia</td>
<td>$155.65</td>
</tr>
<tr>
<td>San Francisco</td>
<td>$187.81</td>
</tr>
<tr>
<td>San Diego</td>
<td>$220.14</td>
</tr>
</tbody>
</table>

*Data as of 2017.
LADWP Strategic Plan

✓ Sets forth our mission, vision, goals and objectives
✓ Guides and measures our success
✓ Helps us to be flexible, agile and accountable as we face changes to the way we operate as a utility. Major challenges include:

- Renewable energy integration
- Regulatory uncertainty
- Customer expectations
- Cyber security
- Drought and climate change
- Infrastructure
Mission Statement

The Los Angeles Department of Water and Power (LADWP) provides our customers and the communities we serve safe, reliable and cost-effective water and power in a customer-focused and environmentally responsible manner.
Five-Year Goals

- Provide exemplary customer service
- Maintain competitive rates while remaining financially stable
- Increase organizational effectiveness, efficiency and innovation
- Implement 100% advanced/smart meters for water and power
- Increase the reliability of our water and power infrastructure
- Achieve zero injuries for our employees and the public
- Be a leader in environmental stewardship
Division-Level Strategic Plans

Strategic Plans for Water System, Power Systems, Information Technology, and Customer Service and Communications have 5-year objectives, with measurable performance indicators.
### Goal #1: Increase the safety and reliability of Power System's infrastructure

<table>
<thead>
<tr>
<th>No.</th>
<th>WHEN</th>
<th>WHO</th>
<th>WHAT</th>
<th>STATUS</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>By August 1, 2017</td>
<td>Jay Puklavetz (lead), Sager Farraj, Eric Hartman and Sanjar Ardalan</td>
<td>Present an IHRP 10-Year Staffing Plan to Reiko Kerr and Andy Kendall for approval that addresses Power System staffing needs (attrition and anticipated growth).</td>
<td>✔</td>
<td>Complete by August 1st. Divisions are entering numbers and the presentation is being finalized.</td>
</tr>
<tr>
<td>2</td>
<td>By October 1, 2017</td>
<td>Tom Casey (lead)</td>
<td>Develop a plan for updating our Power System facility drawing as-built within two weeks of being received in drafting and a plan for addressing current backlog of facility drawing as-built and present to Reiko Kerr and Andy Kendall for approval.</td>
<td>✔</td>
<td>Completed. Team worked on a plan to update facilities and distribution system as-built electrical, structural, civil, and mechanical drawings.</td>
</tr>
<tr>
<td>3</td>
<td>By September 1, 2017</td>
<td>Wayne Hinkson (lead) and Frank Naglich</td>
<td>Develop and present to Reiko Kerr and Andy Kendall a process for vetting new distribution electrical equipment into Power System.</td>
<td>✔</td>
<td>Complete. A process is established the presentation is ready.</td>
</tr>
<tr>
<td>4</td>
<td>By October 1, 2017</td>
<td>Brian Koch (lead), Leslie Abbott, Dan Barnes, Gary Hays, Brian Wilbur and Marvin Moon</td>
<td>Complete a Power System Safety by Design Training Module and present to Reiko Kerr and Andy Kendall for approval.</td>
<td>✔</td>
<td>Complete. The Safety by Design training module is ready. It includes safety tours, videos, in-class training, and emphasis on communication among divisions.</td>
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<tr>
<td>5</td>
<td>By October 1, 2017</td>
<td>Wayne Hinkson (lead), Sager Farraj and Dan Barnes</td>
<td>Develop and present to Reiko Kerr and Andy Kendall for approval a procedure for establishing interdepartmental Projects Teams for project coordination and execution.</td>
<td>✔</td>
<td>On Target - The team is working on this task and will complete the procedure by October 1st.</td>
</tr>
<tr>
<td>6</td>
<td>At the November, 2017 Commissioners meeting</td>
<td>Bassam Abou-Chakra and Dave Siewert (co-leads)</td>
<td>Present to the Commissioners for approval two overhead labor service contracts to meet major PSRP goals.</td>
<td>✔</td>
<td>Bids for the two labor service contracts have closed and are ready to go to Board. Waiting only for LOA/NOC.</td>
</tr>
<tr>
<td>7</td>
<td>By November 1, 2017</td>
<td>Bassam Abou-Chakra and Dave Siewert (co-leads)</td>
<td>Identify contracting needs of the Power System projects for the next five years and present the results to Reiko Kerr and Andy Kendall.</td>
<td>✔</td>
<td>Critical contracting needs for Power System are identified for now and will be updated in the future.</td>
</tr>
</tbody>
</table>
From the Water System Strategic Plan

<table>
<thead>
<tr>
<th>FIVE-YEAR GOAL: <em>Provide safe, high quality water</em></th>
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<tbody>
<tr>
<td><strong>WHEN</strong></td>
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<tr>
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<td>4.</td>
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<tr>
<td>5.</td>
</tr>
<tr>
<td>6.</td>
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</tbody>
</table>
From the Customer Service & Communications Strategic Plan

<table>
<thead>
<tr>
<th>THREE-YEAR GOAL: Enable every employee to be a positive customer service ambassador</th>
</tr>
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<tbody>
<tr>
<td><strong>WHEN</strong></td>
</tr>
<tr>
<td>1. By January 15, 2018</td>
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<tr>
<td>2. By February 1, 2018</td>
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<td>3. By April 1, 2018, contingent upon approval from the General Manager</td>
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<tr>
<td>4. By April 1, 2018</td>
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<tr>
<td>5. By April 1, 2018</td>
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</tbody>
</table>
Vision - Six Main Focus Areas

1. Electrification of Transportation
2. Transition to 100% Clean Energy
3. Groundwater Cleanup and Storage
4. Customer-Facing Automation – Smart Grid
5. Local Hiring/Gender Equity
6. Customer Excellence Across All Customer Classes
Vision for the Future

1. Electrification of the Transportation Sector

- More EVs with more chargers in LA
- GHG reduction credits for each charging station (Sacramento)
- Improve local infrastructure to support higher load to support EV charging

Key Concept: Lots of cars, charging at the right time
Vision for the Future

2. Transition to 100% Clean Energy – reliable, responsible and affordable

- 100% Renewable Energy Advisory Group
- Goal is set – GHG free electricity supply
- Determine the path
- Keep the lights on and keep us on the path
Transition to 100% Clean Energy
Vision for the Future

3. Customer-Facing Automation – Smart Grid

**Year 1:** User-friendly consumption data app for 51,000 Smart Meter pilot program customers

**Year 3:** Fully deployed Communications Network

**HUGE CITYWIDE OPPORTUNITY!**

**Year 5:** Fully deployed Smart Grid with fully operational Smart Power Meters Water Meters after successful deployment of Power Meter project

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Vision for the Future

4. Groundwater Cleanup and increased groundwater storage

- SFB wellfield characterization study completed
- 26 monitoring wells new installed +70 existing wells
- Increase Groundwater Storage by capturing 35,000 AF (11.4 billion gallons) of stormwater
  - Enhance spreading grounds
  - Big Tujunga and Pacoima Dam improvements
- N. Hollywood Wellfield remediation underway

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Vision for the Future

5. Local Hiring and Gender Equity

- Equity Metrics data show need to improve diversity of workforce
- Female employees are less than 1/4th of new hires compared to men, and receive only 1/3rd of the promotions
- Expanding recruitment efforts through multiple strategies, including:
  - Gender/diversity organization national conferences
  - College campus recruitment
  - Partnering/consulting with LAPD, LAFD, other utilities
  - Military outreach and recruitment
- Employee training and development to boost promotions and hiring of women and minorities
6. Customer excellence across all customer classes

We’ve made great improvements
✓ Hold times < 3 minutes since July 2015
✓ List in top three as most trusted utility brand
✓ Adopted Customer Bill of Rights
✓ Launched Low Income Customer Access Working Group

But we still have a lot to do
✓ Customer journey-mapping
✓ Work strategic plan
✓ Contact Center specialized teams for developers/solar/EVs and low income customers
Water Quality: Ensuring Public Health

- Collected 40,000 water samples in 2016
- Conducted over 140,000 tests for compliance with safe drinking water standards
- Investing in major infrastructure projects to meet drinking water regulations
  - UV treatment at LA Reservoir
  - Floating covers at Upper Stone and Elysian reservoirs
  - Completed Headworks East; Headworks West under construction
Rates and Finance

✓ Commitment to affordable and competitive rates
✓ 2016 approval of 5-year rate adjustments provides funding for key priorities:
  - Replacing aging infrastructure
  - Transforming power supplies to achieve clean energy future
  - Securing a sustainable water supply
  - Continuing to improve customer service
✓ Strong financial metrics ensure lower borrowing costs; keep rates low
Overview

- Large, diverse, and stable customer base
  - Total FY2017 operating revenues of $3.7 B
  - Total FY2017 energy sales of 24,022 GWhs
- Approved FY 17-18 budget: $4 B
  - O & M: $1.1 B
  - Capital: $1.4 B
  - Fuel & Purchased Power: $1.5 B
- Vertically integrated: own and operate substantial generation and transmission assets.
- Rate structure provides flexibility to meet renewable requirements while maintaining rate affordability and competitive position.
Water Rates and Finance

Overview

✓ Water System revenues of ~$1.12 billion
  -$418 million of operating income before depreciation
✓ Approved FY 17-18 budget: $1.45 B
  - O & M: $478 M
  - Capital: $861 M
  - Purchased Water: $114 M
✓ Diverse and stable customer base
✓ Own and operate significant water treatment and transmission assets including 7,288 miles of main and trunk lines
LADWP’s 2016 rates ordinances require reporting on 52 performance metrics to RPA quarterly and Board semi-annually.
## Board Approved Rates Metrics

<table>
<thead>
<tr>
<th>Category</th>
<th># Metrics</th>
<th>Category</th>
<th># Metrics</th>
<th>Category</th>
<th># Metrics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Repowering/Once Through Cooling</td>
<td>2</td>
<td>Water System Staffing Program</td>
<td>1</td>
<td>Human Resources</td>
<td>2</td>
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<tr>
<td>Power System Training Plan</td>
<td>2</td>
<td>Water Supply</td>
<td>8</td>
<td>Financial and Human Resources Replacement Project</td>
<td>2</td>
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<tr>
<td>Renewable Portfolio Standard (Owned)</td>
<td>6</td>
<td>Capital Improvement Program</td>
<td>8</td>
<td>Water Expense Stabilization</td>
<td>1</td>
</tr>
<tr>
<td>Power System Reliability Program</td>
<td>12</td>
<td>Water Quality Projects</td>
<td>2</td>
<td>Renewable Portfolio Standard (Owned)</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>22</td>
<td>Total</td>
<td>21</td>
<td>Total</td>
<td>9</td>
</tr>
</tbody>
</table>

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## Board Approved Equity Metrics

<table>
<thead>
<tr>
<th>Equity Core Category</th>
<th>Metric</th>
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</thead>
<tbody>
<tr>
<td>Water &amp; Power Infrastructure Investment</td>
<td>1. Water Quality Complaints</td>
</tr>
<tr>
<td></td>
<td>2. Water System Probability of Failure &amp; Planned Replacements</td>
</tr>
<tr>
<td></td>
<td>3. SAIDI &amp; SAIFI</td>
</tr>
<tr>
<td></td>
<td>4. Power System Reliability Program (PSRP) – Pole, Transformer, Cable Replacements</td>
</tr>
<tr>
<td>Customer Incentive Programs/Services</td>
<td>5. Rain Barrel/Cistern/Water Tank Rebates</td>
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<tr>
<td></td>
<td>6. Turf Removal Rebates</td>
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<tr>
<td></td>
<td>7. Tree Canopy Program</td>
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<td></td>
<td>8. Commercial Direct Install Program</td>
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<td>9. Home Energy Improvement Program</td>
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<td>10. Refrigerator Exchange Program</td>
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<tr>
<td></td>
<td>11. Consumer Rebate Program</td>
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<td></td>
<td>12. Electric Vehicle Infrastructure</td>
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<tr>
<td></td>
<td>13. Low Income &amp; Lifeline Programs</td>
</tr>
<tr>
<td>Procurement</td>
<td>14. LADWP SBE/DVBE Program</td>
</tr>
<tr>
<td>Employment</td>
<td>15. New Hire/Promotion Demographics</td>
</tr>
</tbody>
</table>
Questions