

RFI

Request for Information



for
**Technology Solutions for LADWP Power System
Modernization and Resilience**

RFI Number: 07.16.25-POWER-DVS

Release Date: 07/16/2025

**CITY OF LOS ANGELES
DEPARTMENT OF WATER & POWER**

REQUEST FOR INFORMATION (RFI) NO. 07.16.25-POWER-DVS

(TECHNOLOGY SOLUTIONS FOR MODERNIZATION AND RESILIENCE)

INTRODUCTION:

The Los Angeles Department of Water and Power (LADWP) is requesting interested parties to provide information and feedback that will assist the LADWP in:

1. Conduct a market survey
2. Determine the level of industry interest
3. Obtain high-level cost estimates for budget purposes
4. Obtain information on potential new technologies or approaches
5. Identifying potential piggybacking opportunities

This RFI is issued with the intent to survey the industry to obtain information on innovative technologies that can support and enhance the modernization, decarbonization, and resilience of the LADWP electric grid, and to solicit additional guidance, input, new ideas, and best practices which may be used in the preparation of a Request for Proposal (RFP), Request for Qualifications (RFQ) or Invitation for Bid (IFB); or used to evaluate the feasibility of pursuing a Request for Single/Source Proposal (RSSP) or a Cooperative Agreement (piggyback contract) in accordance with the Los Angeles Charter Section 371(e).

RFPs, RSSPs, or piggyback resulting from this RFI will include research, pilot of technology, consulting services, or deployment of technology into operations.

To fully comprehend the information contained within a response to this RFI, LADWP may request further clarification from one or more respondent(s) in the form of brief verbal communication by telephone, written communication, electronic communication, presentation, interview, or by conducting a site visit at no cost to LADWP.

Responses should include information and recommendations regarding best practices in innovative technology solutions applicable to Advanced Clean Energy Technologies, Grid Modernization, Resiliency and Reliability, Transportation and Building Electrification, and Enhanced Customer Experience and Equity.

All responses should be concise, focused, and limited to ten (10) pages maximum. LADWP will use the information generated as a result of this RFI to determine a solution that is in the best interest of LADWP. In addition, LADWP does not intend to award a contract on the basis of this request or otherwise pay for the requested information.

BACKGROUND:

LADWP is a utility that is created by and exists under the Charter of the City of Los Angeles. It is the largest municipal utility in the United States and serves approximately 4 million residents and 1.6 million registered customers. LADWP has more than 100 years of experience in the generation, transmission and distribution of electricity.

LADWP operates an integrated power system with a diverse energy portfolio that includes renewable resources, hydropower, natural gas, and other energy sources. LADWP is actively pursuing an accelerated transition toward a decarbonized grid in alignment with:

- The City of Los Angeles' sustainability goals,
- The State of California's clean energy mandates, and
- LADWP's own Power Strategic Long-Term Resource Plan.

LADWP is also guided by the LA100 study, a landmark research initiative with the National Renewable Energy Laboratory (NREL), which models pathways to achieve 100% renewable energy by 2035 (www.LADWP.com).

Historically, LADWP has delivered an average annual energy consumption of approximately 21,600 gigawatt-hours (GWh) based Fiscal Year 2022-23 and recorded a peak demand of 6,502 megawatts (MW) on August 31, 2017.

LADWP is strategically investing in grid modernization, digital infrastructure, and customer-centric solutions to meet the growing electrification, climate-driven challenges, and increasing demand for distributed energy resources (DERs).

This RFI is part of LADWP's ongoing effort to identify and evaluate emerging technologies that align with the following LADWP strategic priorities:

- Advanced Clean Energy Technologies
- Grid Modernization
- Resiliency and Reliability
- Transportation and Building Electrification
- Enhanced Customer Experience and Equity

Through this RFI, LADWP seeks to build a technology pipeline that supports innovative partnerships and scalable solutions to help achieve its clean energy and modernization goals.

INFORMATION REQUESTED:

LADWP seeks information from qualified Technology Providers, Academic Institutions, Research Organizations, and Industry Partners about innovative technologies that can support and enhance the modernization, decarbonization, and resilience of the LADWP Power System in the following key areas of interest:

Key Areas of Interest

Advanced Clean Energy Technologies

1. Sustainability and Renewable Integration

- 1-a. Advanced renewable forecasting
- 1-b. Smart inverter controls
- 1-c. Clean Energy Technologies
- 1-d. Carbon Tracking and Emissions Reporting Tools
- 1-e. Energy Storage Technologies
- 1-f. Hydrogen-based Energy Storage

2. Distributed Energy Resources and Demand Flexibility

- 2-a. Virtual Power Plants (VPPs)
- 2-b. Distributed Energy Resource Management Systems (DERMS)
- 2-c. Flexible Load Management
- 2-d. Demand Response

Grid Modernization

3. Grid Optimization

- 3-a. Advanced Distribution Management Systems
- 3-b. Self-healing Grids
- 3-c. Microgrids
- 3-d. Advanced Power Flow Control

4. Transmission and Distribution

- 4-a. Grid Enhancing Technologies (Advanced Conductors, Dynamic Line Rating, and Related Advanced Technologies)
- 4-b. Asset Management
- 4-c. Undergrounding and grid reinforcement
- 4-d. Sensors for Grid Monitoring, Phasor Measurement, and Safety Parameter Tracking
- 4-e. Private LTE for Secure, Reliable, and Scalable Communication Network

5. Artificial Intelligence (AI), Machine Learning (ML) and Data Analytics (DA)

- 5-a. AI/ML for Grid Forecasting, Outage Prediction, Predictive Maintenance

- 5-b. Grid-edge Analytics Platforms
- 5-c. Advanced System Modeling for Grid Planning
- 5-d. Advanced Data Processing and Integrated Visualization Tools

Resiliency and Reliability

6. Wildfire Prediction and Detection

- 6-a. Predictive Analytics for Ignition and Wildfire Modeling
- 6-b. Vegetation Management Technologies (example: LiDAR, Remote Sensing)
- 6-c. AI-based Situational Awareness tools for Real-time Risk Analysis
- 6-d. Aerial Systems for Rapid Fire Detection and Assessment
- 6-e. Wildfire System Planning and Grid Hardening

7. Cybersecurity and System Protection

- 7-a. Operational Technology (OT) security controls
- 7-b. Anomaly Detection and Alert Management Systems
- 7-c. Cyber-resilience Modeling and Response Tools
- 7-d. Physical Security Information Management System

Transportation and Building Electrification

8. Transportation Electrification

- 8-a. Electric Vehicle (EV) Grid Impact Modeling
- 8-b. Vehicle-to-Home (V2H) Systems
- 8-c. Vehicle-to-Grid (V2G) Systems
- 8-d. Smart EV Charging Infrastructure

9. Building Electrification

- 9-a. Heat Pump Technologies and Building Electrification

Enhanced Customer Experience and Equity

10. Customer Experience

- 10-a. Real-time Usage Monitoring Tools
- 10-b. Customer Experience Enhancing Technologies (example: Proactive Communication)
- 10-c. Equitable Energy Programs allocation tools and solutions

Please provide the following information related to specific focus areas your technology addresses, including other current and commercially available technologies, using the item codes (example 1-a, 3-c, etc.) identified under Key Areas of Interest section. Multiple selections are allowed, however, each selection must be submitted separately as a standalone response.

Part 1 – Proposed Technology Solution – Limited to ten (10) pages maximum

A. General Information

- Organization name, contact information, and single point of contact
- Type of entity (example: Vendor, University, Nonprofit Organization, Research Lab, etc.)

B. Technology Overview

- Targeted area(s) of LADWP interest (identified under Key Areas of Interest in this RFI)
- Description of the proposed technology
- Technology maturity level (TRL scale 1-9)
- Prior deployments or pilots

C. Strategic Relevance and Impact

- Alignment with LADWP strategic priorities (identified under Key Areas of Interest)
- Unique value proposition
- Expected outcomes and benefits

D. Operational Feasibility

- Integration approach (example: Grid Ops Control Center, Field Devices, Cloud, Data Management Systems, etc.)
- Estimated High-level Costs
- Implementation Timelines
- Dependencies or required infrastructure (including assumptions)

E. Evidence of Performance

- Performance data, case studies, peer-reviewed research, or pilots
- References or testimonials from other utilities or agencies

F. Scalability and Risk

- Potential for system-wide deployment
- Key risks and proposed mitigation strategies

Part 2 – Current Active Contract(s) with Federal, State, or Local Government Agencies

- Does your firm or institution currently have active contract(s) with federal, state, or local government agencies or corporative purchasing programs that would allow LADWP to piggyback? If so, please provide a copy of the contract(s) with your submission.

SCHEDULE OF EVENTS AND CONTACT INFORMATION:

RFI Release Date	07/16/2025
Respondents' Questions Due Date	10/17/2025
Responses to Written Questions	10/31/2025
RFI Submittal Deadline	11/14/2025

All questions or concerns related to this RFI should be submitted via electronic mail to Douglas Vernon-Scott, Utility Buyer, at SCS4Purchasing@ladwp.com by the date and time prescribed herein.

The LADWP's responses to questions will be posted on the Regional Alliance Marketplace for Procurement (RAMP), found at <http://www.rampla.org>. It is the responsibility of respondents to check RAMP periodically for responses to questions.

USE OF INFORMATION:

Participation in this RFI is optional and not required in order to respond to any subsequent procurement LADWP may take. The RFI is not a competitive solicitation method. Neither LADWP nor the interested party responding has any obligation under the RFI. Interested parties are encouraged to submit responses to all or part of the RFI even if they do not have a current intention to responding to any future RFP or RFQ. Respondents are specifically requested not to submit any type of price proposal other than high-level cost estimates for budget purposes.

All documents submitted in response to the RFI will become a matter of public record and shall be thereupon considered public records. If a respondent believes that any portion of its response is exempt from public disclosure, such portion shall be clearly marked "Trade Secret," "Confidential," or "Proprietary." By submitting information with portions marked in this manner, the respondent represents that it has a good faith belief that such material is exempt from disclosure under the California Public Records Act, California Government Code §§ 6250, et. seq.

GENERAL INFORMATION AND INSTRUCTIONS:

Companies responding to this RFI shall designate a single point of contact within that company for receipt of all subsequent information regarding this RFI. If subsequent bidding opportunities are issued, LADWP is under no obligation to advise any vendor responding to this RFI.

LADWP employs the electronic Request-Solicit-Procure (eRSP) system for posting its bidding opportunities and receiving bid documents. Vendors are advised to monitor the LADWP eRSP website for such opportunities.

All entities or individuals interested in conducting business with LADWP are required to register in the web-based eRSP system. Registration is free and enables the registered entity or individual to gain access to certain information, services and/or materials maintained in eRSP at no charge. Registration may be accomplished at www.ladwp.com/ersp.

LADWP reserves the right to amend or cancel this RFI.

All information gathered as a result of the RFI is subject to provisions of the California Public

Records Act. Respondents to this RFI consent to LADWP incorporating any ideas, concepts, approaches, or strategies into any design, procurement or contractual activities related to any aspect of the project without any liability or consideration on the part of LADWP.

CONTACT INFORMATION:

Please provide your contact information including a brief company profile, and the name, phone number, and email of the key contact person(s).

RFI SUBMITTAL INSTRUCTIONS:

Please submit your response via email to SCS4Purchasing@ladwp.com no later than 11/14/2025.

Responses submitted via facsimile will not be accepted.