

RFI

Request for Information



for
**Pacific Palisades Distribution System Rebuilding
Undergrounding and Voltage Upgrade**

RFI Number: 03.17.25-POWER-RAJ

Release Date: 03/17/2025

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

REQUEST FOR INFORMATION (RFI) NO. 03.17.25-POWER-RAJ

**PACIFIC PALISADES DISTRIBUTION SYSTEM REBUILDING
UNDERGROUNDING AND VOLTAGE CONVERSION**

I. INTRODUCTION:

The Los Angeles Department of Water and Power (LADWP) is requesting information from interested parties experienced in engineering, procurement, and/or construction (EPC/EP/PC) for overhead-to-underground conversion and/or voltage conversion projects related to rebuilding of the Pacific Palisades community under the state of emergency post January 2025 Wind and Wildfire Storm. The ideal respondents to this RFI are organizations that have served as the prime EPC contractor for similar projects. However, LADWP encourages all vendors to provide relevant information within their areas of expertise.

LADWP intends to underground the power lines and upgrade the voltage of the distribution system in the Pacific Palisades area. Information gathered from this RFI will inform:

- Feasibility, approach, and project timelines
- Preferred construction methods and technology solutions that could enhance efficiency and expedite project completion
- Best practices and innovative solutions for system rebuilding and voltage conversion
- Major risks impacting cost and schedule, along with mitigation strategies
- Budgetary estimates with breakdowns for standards development, engineering, procurement, and construction
- Critical information LADWP should include in a future Request for Proposal (RFP) to ensure successful contractor proposals

This RFI shall not be construed as an RFP or an obligation on the part of LADWP. LADWP does not intend to award a contract on the basis of this RFI or otherwise pay for the requested information but may utilize the requested information in a future RFP. 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.

II. 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 1.5 million registered customers. LADWP has more than 100 years of experience in the generation, transmission, and distribution of electricity.

1. Project

Recent wildfires in the Pacific Palisades area have had a devastating impact on the local community—destroying homes, commercial buildings, and other infrastructure—and have also caused extensive damage to the existing electrical distribution system. As part of our rebuilding plan, we are evaluating measures to enhance the resilience, reliability, and safety of the electrical distribution system in the Pacific Palisades area, which may include:

- Converting the distribution system from 4.8kV three wire delta configuration to a new 12kV four wire WYE system
- Undergrounding the overhead distribution system
- Implementing new technologies where applicable

2. Scope of Requested Information

The work within the substation will be completed by LADWP's internal resources. LADWP seeks information for all other work required for the project. Topics of interest include:

1. Engineering, procurement and/or construction for the following:
 - a) 34.5 kV distribution infrastructure outside of the substation (e.g. vaults, conduit, conductor, transformers, switches, etc.)
 - b) 12 kV distribution infrastructure outside of the substation (e.g. vaults, conduit, conductor, transformers, switches, etc.)
 - c) Customer interconnection infrastructure (e.g. stub outs, transformers, service laterals, etc.)
2. Assisting LADWP in conceptualizing and developing distribution standards for a new voltage service class (i.e. 12kV)
3. Identifying existing 4.8kV distribution infrastructure that can be repurposed for the new 12 kV distribution system
4. Other appropriate topics, as determined by the respondent

3. About the Pacific Palisades Area

The Pacific Palisades area is served by Distribution Station (DS) 29, DS-99, Pole Top Distributing Station (PTDS) 195, and PTDS-198.

Table 1. Pacific Palisades Area Wildfire Impact and Loading by DS/PTDS

DS/PTDS	Estimated # of Premises	Estimated # of Destroyed Premises	Pre-Fire Peak Demand (MVA)	Estimated Demand After Reconstruction (MVA)
29	7,143	4,307	29	33
99	1,483	414	7.5	8
195	298	118	1	1.5
198	561	323	2	2.5
TOTAL	9,485	5,162	40	45

LADWP plans to complete project work within substations with internal resources. The following substation upgrades/modifications are planned:

1. Increase DS-29 capacity from 35MVA to 75 MVA, and upgrade voltage from 4.8kV to 12kV
2. Increase DS-99 capacity from 8MVA to 30MVA, and upgrade voltage from 4.8kV to 12kV
3. Transfer of PTDS-195 and PTDS-198 load to the upgraded DS-29
4. Removal of PTDS-195 and PTDS-198

Outside of substations, the Pacific Palisades area currently includes (approximately):

1. 50 miles of 4.8kV overhead distribution
2. 48 miles of 4.8kV underground distribution
3. 10 miles of 34.5kV underground distribution

Factors contributing to the complexity of the project include:

1. Challenging terrain such as windy roads, narrow roads, and hills
2. Densely populated urban and residential areas
3. Existing underground infrastructure
4. Concurrent rebuild efforts by property owners in the area
5. Easement and right-of-way challenges
6. Coordination with various utilities and permitting agencies

4. Additional Links and Reference Material

LADWP encourages interested respondents to review the additional references below:

1. LADWP Power Capacity Map – GIS Map of LADWP’s electrical distribution system that can be filtered by voltage, overhead, and underground.
(www.tinyurl.com/capacitymap)
2. LADWP Electric Service Codes & Specifications
(<https://www.ladwp.com/construction-services/construction-and-renovation-electric-service-requests/codes-specifications>)
3. Pacific Palisades Area 4.8kV Circuit Map (See **Attachment A**)

III. INFORMATION REQUESTED:

Please answer the following questions and provide information related to the project, including other current and commercially available technologies:

1. Company Overview & Relevant Experience

- a) Provide an overview of your organization. Describe your organization’s areas of expertise and service offerings that are relevant to the project (e.g. EPC services for electric utility infrastructure, conduit procurement and construction, overhead-to-underground engineering, etc.).
- b) Describe your experience with voltage conversion and undergrounding distribution systems, especially in urban settings, challenging terrain, or areas requiring multi-agency coordination.
- c) Have you previously coordinated with multiple utilities, city agencies, and traffic control authorities on large-scale projects? Include examples of your approach and any lessons learned.

2. Project Understanding & Approach

- a) Outline your approach for converting the existing 4.8kV system to 12kV, including the undergrounding of existing overhead lines.
- b) Based on your experience, what are effective sequencing or phasing strategies for a large-scale voltage conversion and undergrounding project? What factors influence the prioritization of areas, crew allocation, and overall project efficiency?

- c) What are reasonable project timelines for similar large-scale voltage conversion and undergrounding projects? What are the primary challenges in meeting schedule expectations, and what strategies have been effective in overcoming them?
- d) What factors influence the selection of construction methods for undergrounding distribution systems, such as trenching, directional boring, and microtunneling? What are the key benefits and challenges associated with each?
- e) What considerations are important when developing traffic control plans to minimize disruptions to residents and businesses, particularly along major corridors like Sunset Blvd? What best practices have been effective in past projects?
- f) What additional details or clarifications from LADWP would help you scope the standards development, engineering, procurement, and construction tasks accurately?

3. Engineering & Design Considerations

- a) Which additional/new distribution equipment do you anticipate needing for a successful 4.8 kV to 12kV conversion?
- b) What information is necessary to assess the feasibility of reusing versus replacing portions of the existing 48 miles of underground infrastructure? What methodologies or tools are effective in making this determination?
- c) Which technical standards, whether LADWP or industry-wide, are critical to the design and construction process? Are there any gaps in the current documentation that should be addressed to ensure alignment with best practices?
- d) The voltage mismatch between the eventual Pacific Palisades system (12kV) and the surrounding areas (4.8kV) could limit operational flexibility when there is a need to transfer load or when an abnormal circuit condition exists. What solutions are available to resolve or mitigate this issue?
- e) With LADWP handling the voltage upgrade at the substation, what considerations are important for ensuring smooth coordination at the distribution interface outside the substation? What factors influence the timing of the first set of 12kV positions being ready for energization relative to contract execution? What approaches have been effective for managing 4.8kV to 12kV cutovers while maintaining system reliability?
- f) What ongoing monitoring and diagnostic tools (e.g., remote sensors, fault indicators, etc.) can be included to detect system failures before they become hazards?

- g) How can the underground system be maintained to prevent issues like ground shifts, flooding, or damage from future disasters?
- h) Given that, for various reasons such as keeping project timelines and budgets on track, utilities often use the same rights-of-way or have minimal separation, how do you mitigate the risks associated with these practices? What industry practices are being implemented to ensure the resiliency of power, gas, communication, and other utilities when undergrounding the distribution system to prevent cascading failures across multiple utilities in the event of a major system failure?
- i) What strategies do you incorporate to minimize excavation risks and accidental damage to underground power lines?
- j) What additional details or clarifications from LADWP would help you determine the overall feasibility of the overhead to underground conversion?

4. Coordination & Permitting

- a) What are effective strategies for coordinating with other utilities (telecommunications, cable, gas, water, etc.), city agencies, property owners, and the public to facilitate large-scale infrastructure projects? What challenges typically arise, and how have they been addressed in past projects?
- b) Based on your experience, which authority having jurisdiction (AHJ) permits and regulatory approvals are likely to be the most challenging, and how can they be expedited? Include permitting requirements for converting electric services to underground.
- c) What best practices have been used to manage traffic during construction, particularly for minimizing congestion, ensuring safety, and handling road closures or detours? Are there specific methods that have been especially effective in urban or high-traffic areas?
- d) What support or documentation from LADWP would facilitate agency approvals and permit applications?
- e) Could significant cost savings be achieved if certain permitting or approval requirements were waived? If so, please specify the requirements and provide a high-level estimate of associated cost savings.

5. Budget & Fee Structure

- a) Provide a rough order of magnitude (ROM) estimate, broken down into standards development, engineering, procurement, and construction. If possible, please **also**

provide unit costs in your budgetary estimate (e.g. per foot or per mile). Moreover, provide ROM estimated cost for any necessary changes to electric services to impacted properties.

- b) What contract fee structures (e.g., lump sum, cost-plus, unit rates, time and materials) are commonly used for large-scale undergrounding projects? What are the advantages and disadvantages of each in terms of risk allocation, cost control, and project efficiency?
- c) What are the primary cost drivers for undergrounding and voltage conversion projects? Are there opportunities for cost savings or value-engineering strategies that have proven effective in similar projects?

6. Risk Assessment & Mitigation

- a) What measures can be taken to ensure public safety during construction?
- b) What specific safety protocols can be implemented for crews working in wildfire-damaged terrain, and what personal protective equipment (PPE) is used?
- c) What do you see as the highest-risk factors (e.g., unforeseen underground conditions, permitting delays, supply chain constraints) and how can they be mitigated?
- d) How are contingencies for schedule and cost typically built into planning for large infrastructure projects to accommodate unexpected challenges? What approaches have proven effective in similar projects?
- e) What quality assurance and safety programs are commonly used for projects in densely populated and environmentally sensitive areas? What considerations help ensure compliance with regulatory and industry standards?

7. Technology & Innovation

- a) What technologies, advanced construction techniques, or innovative solutions are available that may be well-suited for this type of project?
- b) Have you implemented these technologies at scale in previous projects? Please cite examples and outcomes.
- c) How do these innovations impact overall project costs, construction timelines, and future operational efficiency?
- d) What solutions or best practices are available to mitigate water intrusion and other

environmental factors that could impact the reliability of an underground system?
Are there emerging technologies or equipment designed to be more resistant to failures caused by water intrusion?

- e) What fault detection, fault location, and health monitoring technologies are available to improve system reliability, support proactive maintenance, and enable faster system recovery? What are the advantages and limitations of different approaches?

8. Information Required from LADWP

- a) What technical, geotechnical, environmental, and load study data would you need from LADWP to develop an informed and accurate proposal if an RFP is issued?
- b) Which industry or LADWP standards and specifications are critical for designing and constructing similar projects? Are there any areas where updates or modifications may be beneficial to align with current best practices?
- c) What additional information or clarifications from LADWP would be most helpful in ensuring a well-informed and comprehensive response to a potential RFP?

IV. SCHEDULE OF EVENTS AND CONTACT INFORMATION:

RFI Release Date	3/17/2025
Respondents' Questions Due Date	3/31/2025
Responses to Written Questions	4/4/2025
RFI Submittal Deadline	4/16/2025

All questions or concerns related to this RFI should be submitted via electronic mail to R Albert Juanico, 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.

V. 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.

VI. 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.

VII. CONTACT INFORMATION:

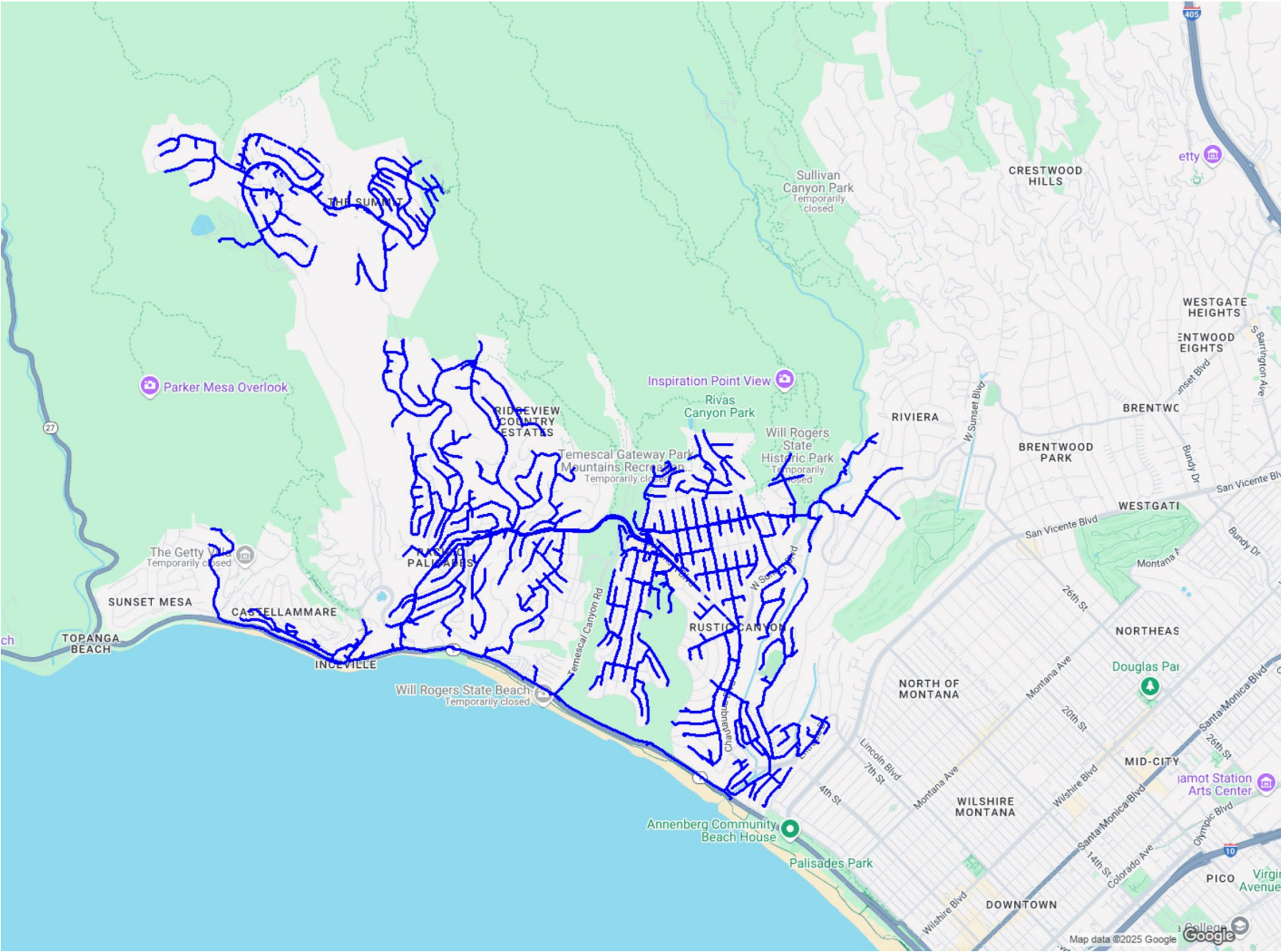
Please provide your contact information including a brief company profile, and the name, phone number, and email of the key contact person(s).

VIII. RFI SUBMITTAL INSTRUCTIONS:

Please submit your response via email to **SCS4Purchasing@ladwp.com** no later than 4/16/2025. Responses submitted via facsimile will not be accepted.

Attachment A – Pacific Palisades 4.8kV Circuits

Road View



Satellite View

