

RFI

Request for Information



for
City of Los Angeles Transmission Corridors to Access
Renewable Energy Resources

RFI Number: 02.20.25-POWER-RAJ

Release Date: 02/20/2025

**CITY OF LOS ANGELES
DEPARTMENT OF WATER & POWER
REQUEST FOR INFORMATION (RFI) NO. 02.20.25- POWER-RAJ**

TRANSMISSION PROPOSAL

INTRODUCTION:

The Los Angeles Department of Water and Power (LADWP) is requesting information from interested parties experienced in the planning, design, and development of high-voltage transmission projects. Through this Request for Information (RFI), LADWP seeks to obtain information that could be used to develop new high-voltage transmission corridor(s), or upgrade existing corridor(s), to enable LADWP achieve the following objectives:

1. Increase renewable energy import capacity to the Los Angeles Basin (Basin)
2. Improve renewable resource geographic diversity and resource-type diversity
3. Reduce thermal loading on existing congested transmission corridors
4. Reduce reliance on in-Basin natural-gas-fired resources
5. Improve ability to meet increasing energy demand
6. Improve resilience to extreme weather events, physical or cyber-attacks, and failures that can result in multiple or cascading transmission line outages.

The information gathered from this RFI is intended to assist the LADWP in:

1. Determining the level of industry interest,
2. Obtaining high-level cost estimates for budgetary purposes,
3. Obtaining information on potential new technologies or approaches,
4. Demonstrate the availability of potential renewable energy resources,
5. Obtaining information on transmission corridors design,
6. Understanding the project proposal configuration,
7. Identifying any real estate of rights-of-way required,
8. Determining the environmental and permitting requirements,
9. Determining the schedule for the project,
10. Identifying workforce or resource needs, and
11. Assessing feasibility and risks

This RFI is issued with the intent to survey the industry, to obtain information on potential new transmission corridor(s), and to solicit additional guidance, input, new ideas, and best practices which may be used in the preparation of a Request for Proposal (RFP), a Request for Sole/Single Source Proposal (RSSP), Request for Qualifications (RFQ), or a Cooperative Agreement (piggyback contract). 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.

All responses should be concise and focused on one or more of the aforementioned objectives. 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 established under The Charter of the City of Los Angeles, and it is the largest municipal utility in the United States, serving about 4 million residents and 1.5 million registered customers. With over a century of experience in electricity generation, transmission, and distribution, LADWP's average annual energy consumption is approximately 23,998 GW-hours (July 2021 to June 2022), and its peak demand recorded as of August 31, 2017, is 6,502 Mega Watts (MW).

As a vertically integrated electric utility, LADWP owns, controls, and operates generation, transmission, and distribution systems that span across multiple states, including 4,081 miles of overhead transmission lines and 136 miles of underground transmission cables. LADWP operates two High Voltage Direct Current (HVDC) systems, the Pacific Direct Current Intertie (PDCI), and the Intermountain Power Project Southern Transmission System (STS), as well as a vast network of High Voltage Alternating Current (HVAC) transmission lines, which includes 500-kV, 230-kV, and 138-kV transmission lines. Together, these systems form a highly integrated transmission network, which is the backbone of LADWP's transmission system, enabling the utility to operate and meet demand reliably.

LADWP's Power System is currently undergoing an accelerated transformation as a result of the following:

1. Enacted public policies from state and local governments, which direct LADWP to transition from fossil fuels to 100% carbon-free emitting resources,
2. Anticipated load growth from transportation and building electrification,
3. New and emerging technologies to modernize its transmission system, and
4. The need to improve resilience to high-impact low-frequency events that can result in long-duration disturbances such as extreme weather events, earthquakes, or acts of terrorism.

In March 2021, LADWP released the findings of a multi-year study, the Los Angeles 100% Renewable Study¹ (Study), with the United States National Renewable Energy Laboratory demonstrating that a 100% renewable grid is achievable, affordable, and reliable for Los

¹ Cochran, Jaquelin, and Paul Denholm, eds. 2021. The Los Angeles 100% Renewable Energy Study. Golden, CO: National Renewable Energy Laboratory. NREL/TP-6A20-79444. <https://maps.nrel.gov/la100/>.

Angeles. On April 19, 2021, after the completion of the Study, Mayor Eric Garcetti announced in the State of the City address that LADWP would adopt the goal to be 100% carbon-free by 2035. Mayor Garcetti also announced that LADWP would provide an energy mix that is 80% renewable and 97% carbon-free by 2030, which was solidified and approved in the [2022 Power Strategic Long-Term Resource Plan](#).

LADWP's Power System is designed to import power to LA Basin through three transmission corridors:

1. Pacific DC Intertie (PDCI), which is a high-voltage direct current (HVDC) bipolar transmission system operated at ± 500 kilovolt (kV).
2. Barren Ridge Corridor, which consists of three 230 kV transmission lines from Barren Ridge to Haskell Canyon and provides access to approximately 1,000 MW of wind and solar power.
3. Victorville-to-Los Angeles (Vic-LA) Path, which consists of the following transmission lines:
 - a. Adelanto – Toluca 500 kV Line 1
 - b. Adelanto – Rinaldi 500 kV Line 1
 - c. Victorville – Rinaldi 500 kV Line 1
 - d. Victorville – Century 287 kV Line 1
 - e. Victorville – Century 287 kV Line 2



The power imported from these three transmission corridors on the northern part of the LA Basin and balanced with fossil fuel-fired generation in the southern part of the Basin. In order to achieve the LADWP’s renewable energy targets, LADWP will need to replace its fossil-fuel-fired generation, including its 3,199 megawatts (MW) of in-Basin natural-gas-fired-generation, by 2035. However, LADWP’s three existing transmission corridors are each at or near their maximum design capacity. Thus, LADWP is seeking to obtain information that will aid in identifying and developing new transmission corridors, or in significantly upgrading the existing transmission corridors, in a cost-effective and reliable manner by 2035.

Additionally, LADWP has experienced extreme weather events which have significantly impacted LADWP’s transmission import capability into the LA Basin. For example, in October 2019, the Saddleridge Fire caused outages on all three of LADWP’s transmission import corridors, significantly reducing LADWP’s renewable energy import capabilities. The wildfire resulted in the loss of all capacity on the PDCI and Barren Ridge Corridor. It also resulted in the loss of two-out-of-five lines on the Vic-LA Path for 5-hours. LADWP dispatched 1,889 MW of in-

Basin natural-gas-fired generation to offset the substantial reduction in import capacity and ensure uninterrupted service to its customers. LADWP is seeking new transmission corridors to enhance resilience against extreme weather events and reduce reliance on in-Basin fossil-fuel-fired generation resources.

INFORMATION REQUESTED:

Please provide the following requested information related to proposed new transmission corridor(s), and/or upgrade the existing corridors, to provide access to diverse renewable energy resources and reliably deliver these resources to the LA Basin, collectively referred to as the “Suggested Solution”:

1. General:
 - A. Provide a general overview of your Suggested Solution.
 - B. Provide a summary of how your Suggested Solution meets the objective(s) of this RFI.
 - C. Identify key advantages and features of your Suggested Solution.
 - D. Describe the process and the approach used to arrive at the Suggested Solution.
 - E. Describe the approach for forming the collaborative team that consists of various areas of expertise, including utilization of other firms and partnerships, that will be needed for developing the Suggested Solution.
 - F. Provide Suggested Solution information as applicable, such as involved technologies, suggested partnerships, required resources, location, footprint, size (MW), existing/upgrade/new, and/or connection/delivery points.
 - G. Identify the type and capacity of the renewable energy resources that the Suggested Solution will enable LADWP to access and the status of development of the renewable energy resources.
 - H. Provide a timeline/schedule for project development to implement the Suggested Solution. If the Suggested Solution uses technologies not yet commercially available, provide a best-guess date or timeframe when such technologies will become commercially available, and justification and viability of use of such new technology.
 - I. Identify potential risks associated with executing the Suggested Solution.
 - J. Identify and provide workforce and resource needs of specialized skills, crews, equipment, and materials that will be required for the Suggested Solution.
2. Safety and Environmental Stewardship:
 - A. Provide the anticipated environmental impacts, remediation, and requirements for the Suggested Solution.

- B. Identify what regulatory requirements, permits, and/or related considerations are needed to implement the Suggested Solution.
 - C. Provide information on any new safety hazards the Suggested Solution, if completed, would introduce to LADWP employees or the public.
 - D. Provide all recommended safety procedures and hazard/risk assessments, including but not limited to, those related to fire, earthquake, accidental release, and catastrophic failure for the Suggested Solution.
 - E. Provide information on how climate change and extreme weather events may or may not impact the Suggested Solution and the approaches and methodologies to combat such events.
 - F. Describe the nature and results of implementation of recently completed projects of a similar nature at other locations (i.e., schedules, financing, costs, performance, length of service to date, measured results, project failures, lessons learned, etc.).
3. Project Development:
- A. Describe how the Suggested Solution could be incorporated into LADWP's facilities or operations.
 - B. Does your Suggested Solution require the addition and/or upgrade of infrastructure? If so, what upgrades would be required?
 - C. Please provide a Google Earth Keyhole Markup Language Zipped (KMZ) file which includes the proposed geographic location of all components of the Suggested Solution, including new transmission line routing, existing transmission lines proposed to tie-in to the Suggested Solution, high-voltage substation locations, proposed renewable energy resources, etc. as applicable. Please clearly label the included components.
 - D. Please provide information regarding required rights-of-way (ROW) and real estate required to implement the Suggested Solution and the current status. Please provide any ROW or real estate agreements in your firm's possession with respect to the Suggested Solution for LADWP's review.
4. Procurement and Economic Considerations:
- A. Provide information on potential funding opportunities from governmental entities or non-governmental entities for which the Suggested Solution would qualify.
 - B. Describe the expected lifecycle of the Suggested Solution, including what steps are necessary at the end of life (i.e., replacement, renovation, upgrade, disposals, mitigations, etc.) and the associated costs.
 - C. Please provide any suggested procurement strategies or commercial structures for implementation of the Suggested Solution.

- D. Describe the expected maintenance procedures required to keep the assets in operation until the end of life of the Suggested Solution, including inspections, regular maintenance, consumables, component replacement, major overhauls, etc., and the estimated operations and maintenance costs.
- E. Provide information on your firm’s proposed business relationship with LADWP as it relates to the Suggested Solution.
- F. Please provide a realistic cost-estimate for the Suggested Solution, including, but not limited to, the following as applicable:
 - i. HVDC Converter Station Engineering, Procurement, and Construction, if applicable
 - ii. HVDC Underground Transmission Cable Engineering, Procurement, and Construction (please include total cost and cost per unit (i.e. \$/mi or \$/LF) for the cable cost)
 - iii. HVDC Offshore Transmission Cable Engineering, Procurement, and Construction (please include total cost and cost per unit (i.e. \$/mi or \$/LF) for the cable cost)
 - iv. Alternating Current (AC) Overhead Transmission Line Engineering, Procurement, and Construction (please include total cost and cost per unit (i.e. \$/mi or \$/LF) for the cable cost)
 - v. AC Underground Transmission Line Engineering, Procurement, and Construction (please include total cost and cost per unit (i.e. \$/mi or \$/LF) for the cable cost)
 - vi. Land Acquisition
 - vii. Securing Easements/Right-of-Way (ROW)
 - viii. AC Substation Engineering, Procurement, and Construction
 - ix. Project Development and Permitting
 - x. Upgrades to Existing Infrastructure
 - xi. Overall Project Cost including items listed above (please include total cost and cost per MW capacity increase (i.e. \$/MW)

SCHEDULE OF EVENTS AND CONTACT INFORMATION:

RFI Release Date	February 20, 2025
Respondents’ Questions Due Date (optional)	March 14, 2025
Responses to Written Questions (optional)	March 31, 2025
RFI Submittal Deadline	April 15, 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.

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 estimate for budget purpose, if requested.

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 (maximum of two (2) pages), 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 **April 15, 2025**. Responses submitted via facsimile will not be accepted.