



# CALIFORNIA High-Speed Rail Authority

## **Notice of Industry Comment Period For the Draft RFP for Traction Power, Solar Photovoltaic, and Battery Electric Storage Systems**

The California High-Speed Rail Authority (Authority) invites interested industry participants to submit comments and feedback on a draft Request for Proposals (RFP) for the upcoming Traction Power, Solar Photovoltaic, and Battery Energy Storage Systems progressive design-build procurement (Traction Power PDB). This industry review does not constitute a solicitation document, nor does it represent a commitment to issue any type of solicitation or enter into any contract or agreement related to the high-speed rail program in the future.

**All industry comments are due by Monday, August 12, 2024.** Comments should be provided in one document, emailed to [power@hsr.ca.gov](mailto:power@hsr.ca.gov). Each comment should be individually numbered and begin with the relevant RFP document name and section number (e.g. Scope of Work, section 1). The Authority has no obligation to respond to individual comments, but may follow up with industry participants to clarify the information provided. Information provided in industry comments may be used for development of the Traction Power PDB contract and procurement documents.

Firms seeking to review the documents and find them at <https://caleprocure.ca.gov/event/2665/0000032160>. Additional information about this review is available below, and on the Authority's website at [Progressive Design-Build Services for Traction Power Request for Proposals - California High Speed Rail](#).

Immediately thereafter, **the Authority anticipates conducting industry one-to-one meetings with firms that identify themselves as potential prime contractors or joint venture partners.** Firms who would like such a meeting and anticipate participating in this procurement should state their interest in an email directed to Rachael Wong at [Power@hsr.ca.gov](mailto:Power@hsr.ca.gov) that clearly indicates the following:

- the firm name;
- whether the firm anticipates participating as a prime or a joint venture partner; and,
- if participating as a joint venture partner, whether any other joint venture partners should be included in this meeting.

These emails are due **August 12th, at 12:00 PM PDT**. The Authority does not guarantee that it will have meetings with all firms and such meetings will be at the discretion of the Authority. Meetings will be either virtual or in-person to be decided after we gauge the volume of interested firms. Only firms that provide comments will be eligible for one-on-one meetings. If a firm wants a one-on-one meeting for upcoming procurements generally, please note that the process to do so is separate and distinct from the meeting process involved with this procurement. Any communications related to future procurements will be provided publicly for the benefit of all potential participants.

California High-Speed Rail Authority

The Authority anticipates the following schedule for release of the Traction Power procurement:

RFP Release:	Early Fall 2024
Proposal Due Date:	First Quarter 2025
Contractor selected:	Summer 2025

Please be advised that all comments submitted, and any accompanying materials, will become property of the Authority and are subject to open government laws such as the California Public Records Act, the Bagley-Keene Open Meeting Act, and Freedom of Information Act (FOIA). If a submitting party has special concerns about information that it desires to make available to the Authority, but which it believes constitutes a trade secret, proprietary information, or other information exempt from disclosure, such submitting party should specifically and conspicuously designate that information as “TRADE SECRET” or “CONFIDENTIAL” in its submittal. Blanket, all-inclusive identifications by designation of whole pages or sections as containing proprietary information, trade secrets, or confidential commercial or financial information will be deemed invalid. The specific proprietary information, trade secrets, or confidential commercial and financial information must be clearly identified as such. Under no circumstances, however, will the Authority be liable for the disclosure of all or a portion of the information submitted in response to this invitation for comment, including the disclosure of any such labeled materials.

Any questions regarding this notice should be directed to Rachael Wong at [Power@hsr.ca.gov](mailto:Power@hsr.ca.gov) or (916) 330-5633.

## **Industry Comment Period for the Draft RFP for Traction Power, Solar Photovoltaic, and Battery Electric Storage Systems**

### **INTRODUCTION**

Thank you for participating in this industry outreach and input effort and assisting the Authority in making this procurement and Project successful. This notice provides a high-level overview of the procurement and contract approach for the performance of Traction Power PDB procurement. This notice also includes a list of questions for industry to respond to as part of the industry review process for the Traction Power PDB.

The Authority welcomes feedback on the industry review drafts of the Traction Power PDB contract General Terms and Conditions and Scope of Work. The Authority has identified areas of special focus for industry in the drafts and requests that industry participants respond to the questions listed below. Industry participants are not required to respond to any or all questions, and may also provide the Authority with feedback relating to the Traction Power PDB outside of these questions.

Capitalized terms used but not defined in this summary have the meanings given in the RFP and Traction Power PDB contract.

### **OVERVIEW**

The Traction Power PDB work will be delivered utilizing a progressive design-build delivery method that incorporates collaborative partnering, in-depth communication, motivation for innovation, and progressive project development toward GMPs for construction using open-book pricing methods.

The traction power system will be a 25-0-25 kV auto-transformer (AT) system fed from static converters and operated as a closed synchronous mesh. The static converters will be supplied from a 3-phase 34.5 kV sub-transmission system which will interconnect the PV and BESS distributed energy resources (DER), and the bulk supply utility connections with Pacific Gas & Electric (PG&E).

Static converters are proposed at the TPSSs to address traction power phase imbalance and harmonics, under acceleration and regenerative braking, and to facilitate the integration of PV power to achieve carbon neutral traction power, and a battery energy storage system to mitigate peak demand impact to the grid and associated costs.

The Authority intends to use solar farms and energy storage systems to enable full operation of the traction energy used by its high-speed trains and rail system installations. The traction power substations ("TPSS") will also be connected to the power grid to ensure sufficient energy at all times of operation and provide a redundant source of power for full operational loads in case of DER failure.

The Work also includes proactive engagement with the Interfacing Contractors and the Authority to ensure the successful identification of all technical and non-technical interfaces across the Interfacing Contracts and to ensure that interfaces are integrated consistently. The Contractor shall work with the Authority to develop the Authority's Program Integration Management Requirements document. The Contractor shall follow a holistic, structured, and interdisciplinary engineering management process to achieve the performance requirements set forth in the Authority's Systems Development Life Cycle (SDLC) requirements in this Contract.

The Work for the Traction Power PDB is intended to be delivered in two phases:

1. Phase 1: A preconstruction services phase when design development and other preconstruction services will be performed; and
2. Phase 2: A construction testing, and maintenance phase, when construction work will be performed.

The Authority expects to incrementally authorize the Work through NTPs as follows:

- (a) **Initial Authorization:**
  - i. Phase 1A Work for the Early Operating Section (approximately 171 miles from approximately Merced Station to Bakersfield Station);
  - ii. Phase 1B Work for the First Construction Section (approximately 119 miles); and
  - iii. Phase 2A Work for the First Construction Section: construction long-lead materials procurement, manufacturing materials and equipment, early site works, and other works authorized by Work Package GMP Amendments to the Contract.
- (b) **First Construction Section Full Authorization:**
  - i. Phase 2A Work for the First Construction Section: All Phase 2A work not included in the initial authorization, including construction, testing, and commissioning.
  - ii. Phase 2B Maintenance of the First Construction Section.
- (c) **Merced Extension Authorization:**
  - i. Phase 1B Work for the Merced to Madera Extension; and
  - ii. Phase 2A Work for the Merced to Madera Extension: construction authorized by Work Package GMP Amendments to the Contract.
  - iii. Phase 2B Maintenance of the Merced Extension.
- (d) **Bakersfield Extension Authorization:**
  - i. Phase 1B Work for the Fresno to Bakersfield Locally Generated Alternative (LGA) Extension; and
  - ii. Phase 2 Work for the LGA Extension: construction authorized by Work Package GMP Amendments to the Contract.
  - iii. Phase 2B Maintenance of the LGA Extension.

**QUESTIONS FOR INDUSTRY COMMENT**

**1. Role in Traction Power PDB Procurement:**

- a. Please provide a summary of your firm's intended role in the Authority's Traction Power PDB procurement. Specify if you will be acting as a prime contractor, joint venture team member, subcontractor, supplier, or another role.

**2. Advancing Design from Phase 1 to Phase 2:**

- a. The Authority seeks services to advance design in Phase 1 (preconstruction services) and establish Work Packages for construction in Phase 2.
- b. Does the current scope for Phase 1 in the Scope of Work include all necessary services and work to allow the Contractor to submit Guaranteed Maximum Price (GMP) Proposals to the Authority? If not, please provide suggestions on including additional or revised services.
- c. Please provide any comments on the intended schedule for the performance of Phase 1 and Phase 2 of the Traction Power PDB.

**3. Teaming and Scope**

- a. The Authority requires a firm or team with experience in both high-speed rail traction power and commercial/utility-scale solar and battery energy storage systems (BESS).
- b. Please provide any comments on the draft Scope of Work. Are there any changes or improvements to the Scope of Work that could enhance competition or assist proposers to prepare a response?
- c. Are there any requirements in the draft documents that would prevent your firm from participating in this procurement? If yes, what changes would you recommend be made that would address your concern and increase competition?
- d. What improvements/changes to the Project, Phasing and/or General Terms and Conditions could the Authority consider to make this procurement more attractive to Contractors?
- e. Are there any particular omissions in the documents, other than areas that are expressly marked as reserved, that you noticed and that should be included?
- f. Are there any lessons learned/recommendations you want to share with the Authority regarding the implementation of the progressive design build approach for this procurement?

**4. Identification of Key Equipment and Supplies:**

- a. Do the documents provide sufficient information to identify long-lead materials? If not, what additional information would be needed to identify long-lead materials?
- b. Given the information in the Scope of Work and General Terms and Conditions, what additional information would Contractors need to provide pricing information for long-lead items at the Proposal stage?

**5. Integration and Coordination among Contractors:**

- a. As one of the first high-speed rail systems in the U.S., the Authority seeks contractors capable of cooperating and coordinating with others to design and implement an integrated overall system. The Authority will manage integration and interfaces among contractors but requires cooperation and design review during the Phase 1

- (preconstruction phase). What improvements do you suggest to Section 3.7 of the General Terms and Conditions (Coordination/Integration) to facilitate effective partnering, collaboration, and integration among the Authority and its contractors?
- b. Do the Scope of Work and General Terms and Conditions provide clear information regarding the expected interactions between the PDB Contractor and the other Interfacing Contractors?
  - c. The Authority plans to have a mutually developed governance structure that applies to all Interfacing Contractors to promote integrated project delivery. What governance structure components between Interfacing Contractors have you found to be the most successful for project delivery?

**6. Maintenance**

- a. The Authority envisions that the contractors will provide maintenance for a period after completion of the construction. The Authority understands that the useful life and life cycle of the systems and components covered under this contract are different, and therefore maintenance period may differ depending on scope. What are recommendations for the Authority to structure maintenance periods for the different components? How would this structure ensure reliability and performance of the assets under the recommended structures?
- b. How would the industry feel about a longer maintenance period than 5 years for a portion of the Work, or, alternatively, a novation of the operations and maintenance obligation to the Authority.

**7. Dispute Resolution**

- a. The Authority is committed to a collaborative and facilitated partnering process in which project-related disputes are resolved at the lowest level possible. In the event that there are any disputes that cannot be resolved in that forum, the Authority has proposed additional dispute resolution options in Section 16 of the General Terms and Conditions.
  - i. What positive and/or negative experiences have you had with the proposed alternative dispute resolution options?
  - ii. What have you found to be the most effective method of resolving disputes on a progressive design build project?

**8. Insurance and Bonding**

- a. Please provide comments regarding the use of a Rolling Owner Controlled Insurance Program during the construction Phase 2A.
- b. Are there changes the Authority should consider in the structure of the Project, Phasing and/or General Terms and Conditions that would improve the bonding conditions for the Contractor.

**9. Other feedback:**

- a. Please provide any other feedback you would like the Authority to consider regarding the draft Traction Power PDB RFP, Contract and Scope of Work.