



BRIEFING: DECEMBER 13, 2018 BOARD MEETING AGENDA ITEM #3

TO: Chairman Richard and Board Members

FROM: Frank Vacca, Chief Program Manager

DATE: December 13, 2018

RE: Consider Extending the Contract with Pacific Gas & Electric for Engineering and Permits Associated with Electrical Interconnections for Time Only

Summary of Recommended Action

Staff is recommending that the Board amend the term of Contract HSR 16-56 with Pacific Gas & Electric (PG&E) for the completion of design and the acquisition of permits for PG&E facility improvement and design review services related to 10 substations to provide for high-speed rail electricity needs within their service area.

Background

Operation of California's high-speed rail system will require the design and installation of a number of individual power connections along the alignment to provide the electricity needed to power the trains. These interconnections will require the Authority to contract with PG&E, Southern California Edison, Los Angeles Department of Water and Power (for 115 kV or higher voltages) and possibly the City of Burbank.

The Authority has been working with PG&E since 2012 to identify the power needs and the appropriate locations to interconnect the high-speed rail system with PG&E's power grid and has to date executed three contracts with PG&E:

- Contract HSR 10-10: A Feasibility and Technical Study contract was executed on December 12, 2012 for \$500,000. The work, completed in June 2014, identified 15 possible connection sites.
- Contract HSR 14-37: This effort evaluated an additional 10 possible locations and developed sufficient information to determine the environmental footprint. The contract was completed for \$4,986,355.72 and expired on September 30, 2017.
- Contract HSR 16-56: The scope includes the completion of design and the acquisition of permits for PG&E facility improvements and design review services related to 10 PG&E substations to provide for high-speed rail electricity needs within the PG&E service area. This contract was for a not-to-exceed amount of \$36,034,000 and a duration to January 31, 2019.

This request is to extend Contract HSR 16-56 for engineering and permits with PG&E.

Prior Board Action

In October 2016, the Board adopted Resolution #HSRA 16-26, directing staff to negotiate and execute a contract with PG&E to provide engineering and permitting for Sites 4-13 within the PG&E service area. This contract was for a not-to-exceed amount of \$36,034,000 and a contract term through January 31, 2019.

Discussion

The Engineering and Permits Interconnections Contract (HSR 16-56) requires PG&E to design, engineer, and permit upgrades to the PG&E system to provide power to the Authority's Traction Electrification System which will power the trains. It also requires PG&E to provide engineering oversight to the design of electrical facilities at the Authority's traction power stations that the Authority will build.

Ten high-speed rail Traction Power Stations (TPSSs) will be located along the alignment at approximately 30 mile intervals. Each TPS will require a utility connection supplying the electricity originating from either PG&E's 115 kV or 230 kV transmission lines. Depending on final electrical configurations, it is anticipated that the Authority will build 4-5 new switching stations (with PG&E oversight), modify 5-6 existing PG&E substations, and construct 14-18 miles of interconnection transmission lines (with PG&E oversight).

This contract requires PG&E to complete the design and engineering for the utility connections, as well as identify and secure permits that will be required for the ultimate construction. PG&E are performing the design for modification and/or expansion of any existing PG&E substation and oversight of the design of the new facilities (substations and interconnection lines) that the Authority will design and ultimately build. These activities include:

- Transmission line planning and engineering
- Substation and switchyard expansion and upgrade engineering
- Protection engineering
- Automation engineering
- Supervisory Control and Data Acquisition (SCADA) engineering
- IT engineering
- Project management needed for project construction
- Land planning, including determination of land needed for temporary construction easements
- Surveys and rights-of-way acquisition needed for construction

The engineering and permitting phase was initially estimated to take two years and, once complete, phased construction of the interconnection facilities would commence under a subsequent contract between the Authority and PG&E – the costs of which are included in the Program Baseline.



However, the high voltage connection work being performed by PG&E under this contract must be coordinated with the Authority's future Track and Systems procurement, which is anticipated to commence in 2019. As such, completion of that portion of the contract has been deferred to coincide with the Track and Systems procurement. Approval of this contract extension will allow the Authority to coordinate between these two related contracts, providing continuity and ensuring that the power necessary to conduct the testing will be available to meet the current delivery schedule.

Legal Approval

The Chief Counsel has reviewed this extension and approved the action to extend to January 31, 2021.

Budget and Fiscal Impact

There is no cost impact to this decision. This decision is a schedule impact only.

REVIEWER INFORMATION	
Reviewer Name and Title: Russell Fong Chief Financial Officer	Signature verifying budget analysis: 
Reviewer Name and Title: Tom Fellenz Chief Counsel	Signature verifying legal analysis: 

Recommendations

Staff recommends that the Board authorize the CEO to extend Contract HSR 16-56 with PG&E for the completion of design and the acquisition of permits for PG&E facility improvements and design review services related to 10 PG&E substations to provide for the Authority's electricity needs within their service area to a term January 31, 2021.

Attachments

- Draft Resolution #HSRA 18-23
- Resolution #HSRA 16-26