

RIVERSIDE PUBLIC UTILITIES

Board Memorandum

BOARD OF PUBLIC UTILITIES

DATE: MARCH 22, 2021

SUBJECT: FIFTH AMENDMENT TO PROFESSIONAL CONSULTANT SERVICES AGREEMENT FOR THE RIVERSIDE TRANSMISSION RELIABILITY PROJECT WITH POWER ENGINEERS, INC., TO EXTEND THE TERM FOR FIVE YEARS, ENDING DECEMBER 31, 2026, FOR A TOTAL AMOUNT OF \$5,363,396

ISSUES:

Consider approval of the Fifth Amendment to the Professional Consultant Services Agreement for the Riverside Transmission Reliability Project with Power Engineers Inc., of Meridian, Idaho, to extend the term for five years, ending December 31, 2026, for a total amount of \$5,363,396; and approve a change order authority of 20% or \$1,072,679.

RECOMMENDATIONS:

That the Board of Public Utilities:

1. Approve the Fifth Amendment to the Professional Consultant Services Agreement with Power Engineers Inc., of Meridian, Idaho, to extend the term by five years ending December 31, 2026, and increase the amount of the agreement by \$5,363,396, for a total contract cost of \$21,672,210 for engineering services related to RTRP project components;
2. Approve a change order authority in an amount not to exceed 20%, or \$1,072,679, of the amended contract amount of \$5,363,396; and
3. Authorize the City Manager, or his designee, to execute the Fifth Amendment to the Professional Consultant Services Agreement with Power Engineers Inc., including making minor and non-substantive changes.

BACKGROUND:

Riverside Transmission Reliability Project (RTRP) is a joint project with Southern California Edison (SCE) and will provide Riverside Public Utilities (RPU) with a critical second connection to the state electric transmission grid by connecting to SCE's existing 230kV Mira Loma – Vista line, to address long-term capacity and reliability needs of the City's electric utility system.

The RTRP Project includes construction of approximately nine (9) miles of double circuit 230kV transmission lines, installation of approximately ten (10) miles of 69kV sub-transmission lines within the City of Riverside, construction of two new substation facilities – SCE Wildlife Substation and RPU Wilderness Substation, improvements to five existing RPU 69kV substations, reconfiguration of existing sub-transmission lines, distribution lines and installation of new telecommunication lines.

SCE will lead the scope of work related to construction of overhead and underground segments of the double circuit 230kV transmission lines, and the construction of the new 230kV SCE Wildlife Substation.

RPU will support the 230kV project coordination in collaboration with SCE and will lead the scope of work for the new 230/69kV RPU Wilderness Substation along with the improvements of RPU's 69kV sub-transmission system.

The RTRP project will divide RPU's electric system into two sections: East (SCE Vista Substation - Source #1), located near Newport Avenue and Grand Terrace Road, and West (SCE Wildlife Substation - Source #2), located near Wilderness Avenue and Ed Perick Street, (see Figure 1). The East System will be served from SCE's existing Vista Substation and the West System will be served from SCE's proposed Wildlife Substation. Both systems can be operated in parallel under emergency conditions to meet the reliability goals when there is a loss of one of SCE's sources. Additional system improvements may be necessary as part of the new system reconfiguration, which will be added to RTRP scope of work, subject to ongoing and future planning study results.

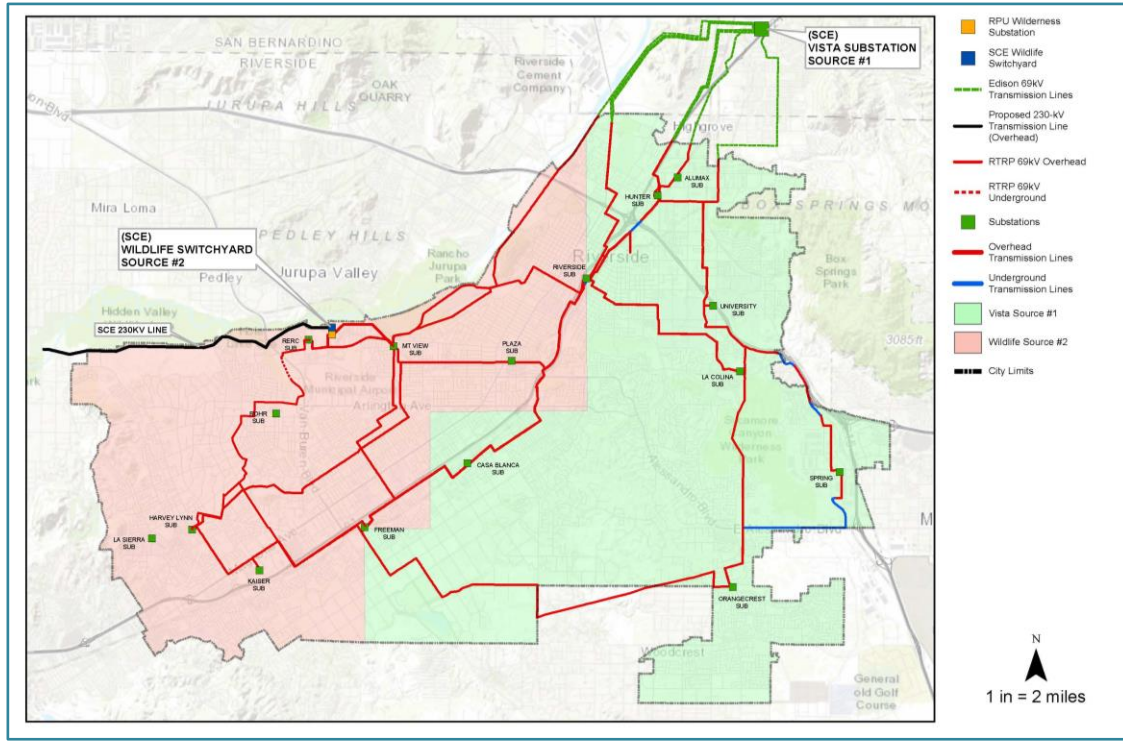


Figure 1: RTRP System One-line showing Two Transmission Sources and System Bifurcation

On January 20, 2006, the Board of Public Utilities (Board) approved the RTRP in concept (titled as Riverside 220kV upgrade project), approved an initial appropriation of \$800,000 for preliminary work and tentatively approved the selection of Power Engineers as the project consultant for RTRP based on a Request for Proposal (RFP) that covered both

Preliminary work and Detailed work.

On June 26, 2006, the Board of Public Utilities approved an agreement between RPU and Power Engineers for \$430,000 to perform environmental work for RTRP to keep the project on track in the interim while Engineering Services Agreement to cover the detailed design, easement acquisition, material procurement and construction management was still under negotiations.

THE AGREEMENT

On October 20, 2006, following a competitive Request for Proposal process, the Board recommended that the City Council approve a \$9,632,698 Professional Consultant Services Agreement with Power Engineers Inc. (Power Engineers) for a five-year term to provide environmental, permitting, easement acquisition, and engineering services for RTRP. Power Engineers was selected based on price as well as their solid reputation and qualifications for completing complex engineering projects similar to RTRP. The City Council approved this agreement on November 07, 2006.

Power Engineers scope of work under this agreement covered the following services for RTRP:

Services	Scope
Project Management	Project supervision, procedure documentation, project and document control, reporting and review.
Environmental	Environmental coordination, public outreach, agency meetings and coordination, Initial Study, Environmental Impact Report (CEQA related), and supplemental permitting.
Land Acquisition	Rights of Entry, easement requirements, property research, and easement acquisition.
Engineering and Design	Pre-design, field and permitting activities; line and substation design, construction drawings, quality assurance, pre and postconstruction activities.
Procurement	Procurement review, requests for quotations, bid opening and review, expediting and receiving.
Construction Management	Contractor(s) pre-qualification and selection; support and administration; inspection and construction technical support

Power Engineers began the environmental process in January 2007, a necessary step to identify proposed transmission line routes and to begin work on the engineering and easement acquisition tasks within the respective areas. Since then, Power Engineers has worked on and/or provided California Environmental Quality Act (CEQA) related studies and coordination, environmental surveys of transmission line routes, public outreach efforts, Environmental Impact Report (EIR), application support for Certificate of Public Convenience and Necessity (CPCN) from the California Public Utilities Commission (CPUC), Land acquisition matters, Substation and 69kV sub-transmission line design work, support for material procurement, project and construction management.

In 2008, a portion of the RTRP scope of work was parsed out and accelerated (Sub Transmission Project or "STP") due to an urgent need for system reinforcement, independent of RTRP. The remaining portion of RTRP continued to include the establishment of the

second transmission source in the City, including construction of 69-kV transmission lines that are directly connected with the delivery of energy from RPU Wilderness Substation to existing electric substations. On July 11, 2008, the RPU Board approved an increase in change order authority to allow Power Engineers to complete scope of work for STP. The STP scope of work was completed in 2014.

In 2010, while Power Engineers was preparing the plans and specifications for construction of STP, RPU received notice from the Riverside County Transportation Commission (RCTC) to relocate the RPU electric facilities in conflict with its Caltrans 91 Freeway widening project which were entwined with STP scope. To reduce confusion and the chances for design error, the relocation work in the vicinity of STP was added to the Power Engineers' STP related scope of work.

On June 18, 2010, the Board approved the First Amendment to the Professional Services agreement with Power Engineers to provide engineering services to relocate the 69kV lines in conflict with the Caltrans 91 Freeway widening project in the amount of \$90,337. Power Engineers has completed this scope of work.

On October 21, 2011, the Board approved the Second Amendment to the Professional Services agreement with Power Engineers to provide additional services necessitated by Caltrans' design changes and expanded services, not identified within the RFP for RTRP or known at the time of its release. The second amendment increased the amount of the agreement by \$1,564,586, extended the term of the agreement through December 31, 2016, and increased the change order authority from 15% to 25% of the total agreement amount. The total authority for the second amendment to the agreement, including the 25% change order authority, is \$14,109,526. Power Engineers has completed the STP (including Caltrans) related scope work and continued working on remaining scope of work of RTRP.

On December 18, 2015, the RPU Board approved the Third Amendment to the Professional Services agreement with Power Engineers extending the term of the agreement from December 31, 2016 to December 31, 2021, and, to incorporate previously authorized change orders (\$2,821,552), and additional scope of work (\$1,920,625), for a total increase of \$4,742,177. The most significant change orders and scope of work additions included - increases in scope to the EIR process (due to City of Jurupa Valley incorporation, ongoing developments in Jurupa Valley, ongoing oppositions to project, lawsuit challenging the EIR), transmission line modeling and easement acquisition process, and expanded scope related to the Caltrans work, and, the additional scope of work tasks specific to the CPCN and approval process required by the Interconnection Facilities Agreement (IFA) with SCE.

Since the third amendment to the Professional Services agreement with Power Engineers, RPU approved \$279,016 in change orders (within \$280,000 board approved contingency limit for third amendment) for updates needed in 69kV design related matters.

On January 07, 2020, the RPU Board approved the Fourth Amendment to the Professional Services agreement with Power Engineers for updating hourly rates date from 2020 through 2022. Power Engineers last updated their hourly rates in 2016 after the third amendment to their Professional Services agreement.

By the end December 2020, Power Engineers made significant progress related to the RTRP scope of work, which included both 69kV and 230kV related project components. Power

Engineers has been diligently working on the 69kV Riverside Energy Resource Center (RERC) lines related project components that were not dependent on CPCN approval. Upon the March 12, 2020 CPCN approval of RTRP by the CPUC, Power Engineers has now focused on several other fronts which include additional 69kV project components and support for 230kV components of RTRP.

The following RTRP scope of work has been completed by Power Engineers:

- EIR development & Support for environment process matters of CEQA & CPCN approval including support for Land and Water Conservation Fund (LWCF) and Multiple Species Habitat Conservation Plan (MSHCP) matters, environment surveys, traffic studies & Public outreach matters
- Low Voltage Alternatives study report
- Support for survey, field check, Right-of-way/Easement acquisition and pre-design utility conflict identification matters of new 69kV RERC lines
- Design and Construction Bid specs preparation for Material Yard
- Design and Construction Bid specs preparation for RERC-Harvey Lynn line overhead and underground sections and drilled piers foundations and Support for Material procurement
 - Steel & Wood poles, long lead and short lead material items for the line work
- Design updates for changing standards and procedures
- Substation Design updates, Construction Specs Development, Drawing restorations, and Design of Non-operational SCADA system for Harvey Lynn Substation
- Wilderness Substation Site Layout & preliminary Grading Design (Portion of the site will be sold to SCE in future to construct Wildlife station as per Interconnection Facilities Agreement)
- Support for Project Management, Construction Management and Environmental monitoring activities for project pieces in design and/or construction

The following RTRP scope of work is In-progress by Power Engineers:

- Support for EIR addendum and ongoing environment process matters such as MSHCP
- Support Construction Management for the RERC-Harvey Lynn & Freeman Overhead and Underground cable installation
- Support for survey, field check, Right-of-way/Easement acquisition and pre-design utility conflict identification matters
- Design and Construction Bid specs preparation for RERC-Freeman line overhead and drilled pier foundations
- Support for Material procurement - Steel & Wood poles, long lead and short lead materials
- Design substation upgrades and Construction Bid specs preparation for Freeman Substation major reconfiguration to receive RERC line
- Substation Design Standard updates
- Sub-transmission Planning/Protection studies
- Support for Project Management, Construction management and Environment monitoring activities for RERC-Freeman linework
- Technical Support of Customer/Community Outreach and General Project Communications matters
- Design scoping and initiation of geotechnical investigation, grading, landscaping, and wall and fencing design for the Wilderness substation site (Portion of the substation site will be sold to SCE in future to construct Wildlife station as per Interconnection Facilities Agreement)

- Wilderness station scoping, coordination with SCE and preparation of estimated BIM (Building Information Modeling) station design plans
- Engineering design coordination with SCE and support for Project outreach matters.

The following RTRP scope of work (Future Tasks) are In-planning phase by Power Engineers:

- Design and Construction specs of a new 230/69kV RPU Wilderness Substation including telecommunications for protective equipment;
- Design and Construction specs of six (6) 69kV overhead line connections to integrate the RPU Wilderness Substation to RPU's electric system;
- Support for survey, field check, Right-of-way/Easement acquisition and pre-design utility conflict identification matters related to 69kV line connections
- Technical Support for material procurement matters for substation and line construction
- Design upgrades to existing RPU substations at Mountain View, Freeman, Riverside and RERC to connect the 69kV lines;
- Design 69kV system improvements to existing Casa Blanca, Orangecrest, Plaza & Kaiser substations to support the new system configuration
- Preparation of comprehensive System Coordination study work plan
- Support for Project Management, Construction management and Environment monitoring activities for project pieces in design and/or construction
- Project Management support/coordination related to SCE's 230kV scope of work, environment matters and support for Project outreach matters.

DISCUSSION:

Since 2006, Power Engineers has been an integral part of the RPU's RTRP team. RTRP has been an extremely complex undertaking with many challenges and delays. The project dealt with outside agencies such as, Southern California Edison, California Independent System Operator (CAISO), County of Riverside, California Public Utilities Commission (CPUC), regional and local leaders. Throughout this project, Power Engineers has supported RPU through each process. Power Engineers not only guided RPU through the complicated CEQA EIR certification process and public outreach matters for the new transmission routes and design; but also successfully assisted RPU to the approval stage of CPCN after many other intermediate steps in the process. The CPCN approval also resulted in reimbursement of \$21,785,355 in RPU costs for CAISO controlled facilities and other CEQA & CPCN related activities, from SCE.

unexpected scope additions, changes and complexities in the RTRP planning process have added additional environmental, planning and design tasks to the Power Engineers' existing agreement. RPU earmarked funds to address the additional scope related to these uncertainties within Power Engineers' agreement amount during the Third Amendment which kept the project on track until now.

The protracted work on RTRP, increased CEQA related costs, changes in design and material standards, parsing-out and accelerating portions of work for required developer coordination or to avoid project risk/conflicts has resulted in additional time, resources and costs on Power Engineers contract. Power Engineers had to redesign a portion of the system due to changes in the standards since 2006 and for changing system conditions. Additionally, with approval of CPCN, the design work on the project has advanced in some

areas faster than expected. All this work has resulted in depletions of funds allocated to Power Engineers sooner than expected, and RPU anticipated that Power Engineer's contract would run out of funds in March 2021.

POWER ENGINEERS AGREEMENT BALANCE AS OF 12/26/2020

Scope of Work	Existing 4 th Amendment Agreement*	Total Invoiced	Balance
RTRP 69kV	\$8,565,803	\$8,241,002	\$324,801
RTRP 230kV	\$5,190,661	\$4,901,748	\$288,913
STP	\$2,377,988	\$2,371,257	\$6,731
Caltrans	\$174,362	\$174,362	\$0
Total	\$16,308,814	\$15,688,369	\$620,445
<i>* including the approved amendments and change orders amounts</i>			

Many upcoming project components of RTRP are already in the design and planning phases by Power Engineers. It is important that Power Engineers complete the scope of work on all remaining project components of RTRP to ensure consistency in design approaches and construction methods as well as proper coordination of current and future tasks so that quality is not compromised, and no delays occur. Power Engineers has the historical knowledge and is familiar with RPU's design and construction standards, making extremely valuable and well positioned to continue designing and supporting the project as RPU's consultant.

However, additional funds are needed for Power Engineers to continue to provide services for in-progress and in-planning scope of work items listed above to carry through the design and construction of remaining RTRP project components to completion.

RPU staff requested Power Engineers to provide a proposal to complete the remaining scope of work for in-progress and in-planning RTRP project components listed above.

PROPOSED FIFTH AMENDMENT DETAIL

Scope of Work	Existing 4 th Amendment Agreement*	Proposed Fifth Amendment (March 22, 2021)	Proposed New Agreement Total
RTRP 69kV	\$8,565,803	\$5,171,556	\$13,737,359
RTRP 230kV	\$5,190,661	\$191,840	\$5,382,501
STP	\$2,377,988	\$0	\$2,377,988
Caltrans	\$174,362	\$0	\$174,362
Total	\$16,308,814	\$5,363,396	\$21,672,210
<i>* including the approved amendments and change orders amounts</i>			

Staff reviewed Power Engineers' proposed fifth amendment proposal and pricing and

determined the proposal to be fair and reasonable, and in line with industry norms. Power Engineers has offered to maintain their current rates until the end of 2022 and will revise their hourly rates in early 2023 with a negotiated 3% (average) price escalation factor which will be maintained until the end of 2026. This negotiation is in line with Purchasing Resolution 23256 Section 702 (g); that Competitive Procurement through the Informal Procurement and Formal Procurement process shall not be required when services can be procured from a contractor who offers the same or better price, terms and conditions as the contractor previously offered as the lowest responsive bidder under competitive procurement or negotiation conducted by the City or other public agency, provided that, in the opinion of the Manager it is the best interest of the City to do so. In addition, the project specific knowledge accumulated by Power Engineers is paying off with respect to work efficiencies, team collaboration, and trust. RPU staff is satisfied with Power Engineers' high-quality work, professionalism, and expertise that repeating the RFP process at this time, will not result in a better-qualified engineering firm or consultant fee for this project. Seeking a different consultant will result in significant learning curve to learn project tasks, standards & procedures, a gap in historic knowledge and design coordination matters which will add more costs and schedule risk.

RPU staff and Power Engineers are confident that the proposed Fifth Amendment has reasonably captured all remaining tasks and costs associated with completing the RTRP scope of work based upon the conditions that exist today.

Staff also recommends that 20% Change Order authority to the Power Engineers Agreement be approved due to the term of the assignment, complexity of the project and potential delays that should be anticipated. The proposed Fifth Amendment extends the term of the agreement to December 31, 2026, addresses changes to the RTRP schedule, increases the amount of the agreement by \$5,363,396 for a total amount of \$21,672,210, and authorizes staff to issue change orders not to exceed 20% or \$1,072,679 of the Fifth Amendment amount.

The Purchasing Manager concurs that the recommended actions comply with Purchasing Resolution No. 23256, Section 702 (g).

FISCAL IMPACT:

The fiscal impact for the Fifth Amendment to Agreement is \$5,363,396. Sufficient funds are available in Public Utilities' RTRP Electrical Account No. 6130000-470685.

Prepared by: George R. Hanson, Utilities Assistant General Manager/Energy Delivery
Approved by: Todd M. Corbin, Utilities General Manager
Approved by: Al Zelinka, FAICP, City Manager
Approved as to form: Kristi J. Smith, Interim City Attorney

Certifies availability of funds: Edward Enriquez, Chief Financial Officer/City Treasurer

Attachments:

1. Fifth Amendment to Professional Consultant Services Agreement
2. Presentation