



MULTI-SUBSTATION 69KV CIRCUIT BREAKER REPLACEMENT PROJECT

Riverside Public Utilities

Board of Public Utilities
September 25, 2023

RiversideCA.gov

1

BACKGROUND

1. On September 23, 2019, the Board approved Work Order No. 1906356 for an initial capital expenditure of \$3,500,000 for the Multi-Substation Breaker Replacement Project with anticipated total project budget of \$7,636,200.
2. On February 22, 2021, the Board approved an increase to Work Order No. 1906356 from \$3,500,000 to \$6,500,000.
3. The report mentioned that Staff would return to the Board to request approval of final funds at a later scheduled date.



2

RiversideCA.gov

2

BACKGROUND

4. As of August 2023, the project stands at 85% of design completed, 70% of construction completed, and 95% of procurement completed.
5. The current approved Work Order amount is projected to be depleted by December 2023.
6. Additional funding is required to complete project.



3

RiversideCA.gov

3

BACKGROUND



- Typical Oil Circuit Breaker
- Aged Unit



- Typical Vacuum Circuit Breaker
- Replacement Unit

Scope of work includes replacing twenty-four (24) 69kV circuit breakers and foundations and upgrading associated auxiliary systems, wiring, and automation systems.



4

RiversideCA.gov

4

DISCUSSION

1. As the project nears completion, staff analyzed completed project costs in addition to the estimated remaining costs, the new projected project total is \$7.2M. This represents a \$700,000 deficit from the Board approved project total of \$6.5M.

2. The remaining work involves project management, minor design, construction, testing, and as-builts for the last 4 power circuit breakers to be replaced.



5

RiversideCA.gov

5

PROJECT BREAKDOWN

WORK TYPE	PERFORMED BY:	AMOUNT (\$)
Fabrication/Delivery of 69kV Power Circuit Breaker per RFB No. SUB-836	V&S Schuler – Awarded and Fully Paid	\$2,199,682
Consultant Design Services per RFP No. 1864	Leidos Engineering, LLC – Awarded and Fully Paid	\$976,318
Parts, Material and Equipment Rentals	Miscellaneous Vendors	\$700,000
Project Management and Engineering	Riverside Public Utilities	\$700,000
Construction, Factory Testing, Field Testing and Commissioning	Riverside Public Utilities	\$2,280,000
Contingency (5%)		\$343,000
Work Order Total:		\$7,200,000
Start Date:		February 2020
Anticipated Duration:		July 2024



6

RiversideCA.gov

6

REMAINING WORK BUDGET

Description of Work	Amount (\$)
RPU Staff – Project Management and Engineering	\$200,000
Miscellaneous Material and Equipment Rentals	\$150,000
Construction and Commissioning	\$350,000
Work Order Additional Increase Amount Requested (Fiscal Impact)	\$700,000

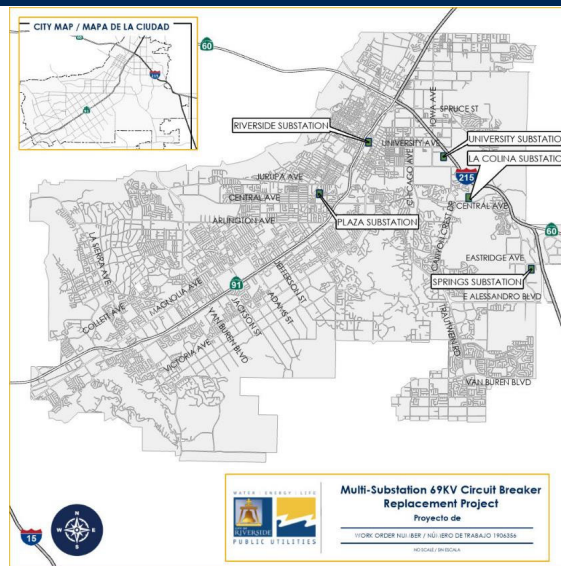


7

RiversideCA.gov

7

PROJECT SITE MAP



8

RiversideCA.gov

8

STRATEGIC PLAN ALIGNMENT

Strategic Priority 6 – Infrastructure, Mobility and Connectivity

Goal 6.2 – Maintain, protect and improve assets and infrastructure within the City’s built environment to ensure and enhance reliability, resiliency, sustainability, and facilitate connectivity.

Cross-Cutting Threads



Community Trust



Fiscal Responsibility



Sustainability & Resiliency



Equity



Innovation



9

RiversideCA.gov

9

RECOMMENDATION

That the Board of Public Utilities approve an increase to Work Order No. 1906356 from \$6,500,000 to \$7,200,000, for a total increase amount of \$700,000, to complete the remaining design, construction, procurement, testing, commissioning, and construction support for the Multi-Substation 69KV Circuit Breaker Replacement Project.



10

RiversideCA.gov

10