

PLAZA SUBSTATION 4KV TO 12KV CONVERSION MAKE-READY FOR CIRCUITS 443 AND 460

Riverside Public Utilities – Energy Delivery

Board of Public Utilities

July 08, 2024

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BACKGROUND

1. Outlined in the Electric System Master Plan (ESMP)
2. 4kV distribution facilities are outdated, inefficient, and difficult to procure
3. Utility poles, crossarms and associated aging electrical infrastructure are past their useful life and at risk for failure
4. Make-ready project will facilitate future 4kV to 12kV voltage conversion
5. Voltage conversion projects upgrade system capacity and reliability



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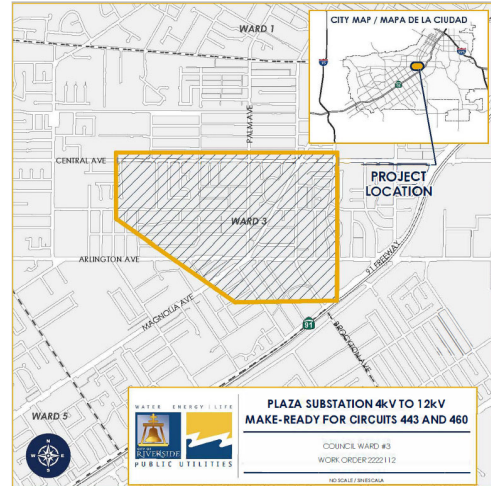


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PROJECT LOCATION

1. The project area is in the vicinity north of Arlington Avenue and Palm Avenue, south of Central Avenue and Palm Avenue, west of Brockton Avenue, and east of Valencia Street
2. Customer notifications will be sent out prior to any service disruptions
3. Electric Service Disruptions will be coordinated to minimize impact to customers



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SCOPE OF WORK

1. Work performed by RPU Field crews
2. 991 customers in the service area
3. 136 utility poles, 56 transformers, approximately 10,645 circuit feet of primary conductors, 7,773 circuit feet of secondary wires, and related overhead distribution facilities
4. Approximately 10 months to complete the work



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BENEFITS

1. Increases electric system reliability and safety
2. Improves electric services and power quality to customers
3. Improves system operations and response time to outages
4. Eliminate antiquated facilities that are no longer available for replacement
5. Make-ready for upcoming 4-12kV voltage conversion project



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PROJECT BREAKDOWN

Project and Fiscal Breakdown

Work Type	Performed By:			Amount (\$)	Percent of Total (%)
Design	RPU Engineering			\$251,822	7.3%
Construction-Electrical Work	RPU Field Forces and Operations	Labor	\$2,098,809	\$2, 934,707	84.3%
		Equipment	\$489,302		
		Material	\$346,596		
Construction Contingency – (10%)				\$293,471	8.4%
Work Order Total:				\$3,480,000	100%
Anticipated Start Date:				August 2024	
Anticipated Duration:				10 Months	



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STRATEGIC PLAN ALIGNMENT

This item contributes to Strategic Priority No. 6 Infrastructure, Mobility and Connectivity and the following goal:

Goal No. 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



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RECOMMENDATION

That the Board of Public Utilities approve Work Order No. 2222112 for a total capital expenditure of \$3,480,000 for the Plaza Substation 4kV to 12kV Conversion Make-Ready for Circuits 443 and 460 Project.



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