



PROCUREMENT OF TWO 220KV-66KV SUBSTATION POWER TRANSFORMERS FOR THE WILDERNESS SUBSTATION

Energy Delivery

Board of Public Utilities
January 13, 2025

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BACKGROUND

1. Riverside Transmission Reliability Project (RTRP) is a critical project that provides a second connection to the state electric transmission grid
2. Requires the new Wilderness Substation, which will connect to Southern California Edison (SCE) via the proposed Wildlife Substation
3. Wildlife Substation will connect to the existing SCE Mira Loma Substation, creating a robust and reliable connection to the transmission grid



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BACKGROUND

4. Wilderness Substation
 - a. Will be the only 220 kV substation in the City of Riverside
 - b. Will serve RPU's west system
 - c. SCE Vista Substation will continue to supply power to RPU's east system

5. Wilderness Substation will include two 220kV power transformers and six 66kV transmission lines



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SCOPE OF WORK

1. Procurement of two new 220k Power Transformer
2. Future project phases will include procurement of:
 - a. 2 - 220KV circuit switchers
 - b. 16 - 66KV circuit breakers
 - c. 40 - 66KV disconnect switches
 - d. 2- 66KV capacitor banks
 - e. Control building
 - f. Steel structure
 - g. Associated hardware



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DISCUSSION – BID RESULTS

1. RPU requested quotes for two 220kV-66kV Power Transformers in response to Bid No. Sub-02B
2. Six (6) Power Transformer vendors were invited to participate
3. Hyundai of Ulsan, South Korea, as the lowest responsive and responsible bidder

Vendors	City Location	Bid Amount	Rank
Hyundai	Ulsan, South Korea	\$11,912,380.39	1
Iijin	Hongseong, South Korea	\$12,970,938.75	2
GE	Canoas – RS, Brasil	13,217,547.50	3
SMIT	Nijmegen, Netherlands	NO BID	N/A
HICO	Memphis, Tennessee	NO BID	N/A
Hitachi	Hitachi City, Japan	NO BID	N/A

Engineer's Estimate

\$12,000,000

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PROCUREMENT & FISCAL BREAKDOWN

Work Type	Performed By:	Amount (\$):	% of Total:
220kV-66kV Substation Power Transformers	Hyundai	\$11,912,380.39	90%
Contingency – 10% (Contract)		\$1,191,238.03	10%
Work Order Total:		\$13,103,618.42	100%
Anticipated Start Date:	February 2025		
Anticipated Duration:	48 Months		

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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



Equity



Fiscal Responsibility



Innovation



Sustainability & Resiliency



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RECOMMENDATIONS

That the Board of Public Utilities:

1. Authorize the procurement of two Power Transformer from Bid No. SUB-2B for Wilderness Substation with HD Hyundai Electric America Corporation of Duluth, Georgia, in the amount of \$11,912,380.39 with a contingency of 10% in the amount of \$1,191,238.03 for a total not-to-exceed amount of \$13,103,618.42; and
2. Authorize the City Manager, or designee, to execute any documents necessary to effectuate the procurement described herein, as well as the ability to make minor non-substantive changes in alignment with all purchasing policies.



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