

SUPPLEMENTAL APPROPRIATION TO RECEIVE THE SECOND TRANSMISSION CONNECTION TO STATE GRID - RTRP

Public Utilities Department

City Council
January 26, 2021

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1

BACKGROUND

1. Riverside Transmission Reliability Project (RTRP) is a joint project with Southern California Edison (SCE) to provide City of Riverside a critical second connection to the state transmission grid to increase capacity and Improve reliability
2. January 20, 2006, the Board approved RTRP
3. City experienced complete blackout in 2007
4. California Independent System Operator (CAISO) ordered RTRP be built in 2009
5. February 5, 2013, the City Council certified the Final Environmental Impact Report (FEIR) for RTRP



2

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2

WHAT IS RTRP

- RTRP consists of two major elements:

#1 – **SCE's portion:** high voltage element constructed, owned, and operated by SCE (230 KV transmission line from Jurupa Valley including new Wildlife Substation in City)

#2 – **City's portion:** 69kV element that will be constructed, owned, and operated by RPU (new Wilderness Substation, upgrades to existing substations, and 69 KV improvements and system bifurcation in City to incorporate the new connection into the RPU grid)

- Both elements #1 and #2 are required



3

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3

History of RTRP

December 2004
Riverside submits application to SCE for a second interconnection point to the CAISO grid

2005
SCE conducts system and facilities studies

January 2006
Riverside Public Utilities Board approves Riverside Transmission Reliability Project (RTRP)

June 2006
CAISO Board of Governors approves RTRP and urges SCE to complete RTRP by Q2 2009

February 2013
Riverside City Council certifies RTRP EIR (2013 RTRP EIR)

April 2015
SCE submits RTRP CPCN application to CPUC

September 2016
SCE revises RTRP CPCN application to underground a portion of the transmission line (the "Hybrid Project")

January 2018
RTRP Lower Voltage and Other Design Alternatives Report filed with the CPUC

October 2018
CPUC issues the Final Subsequent EIR (FSEIR)

March 2020
CPUC issues CPCN for RTRP

February 2021
RTRP construction starts (anticipated)

2026
RTRP estimated completion

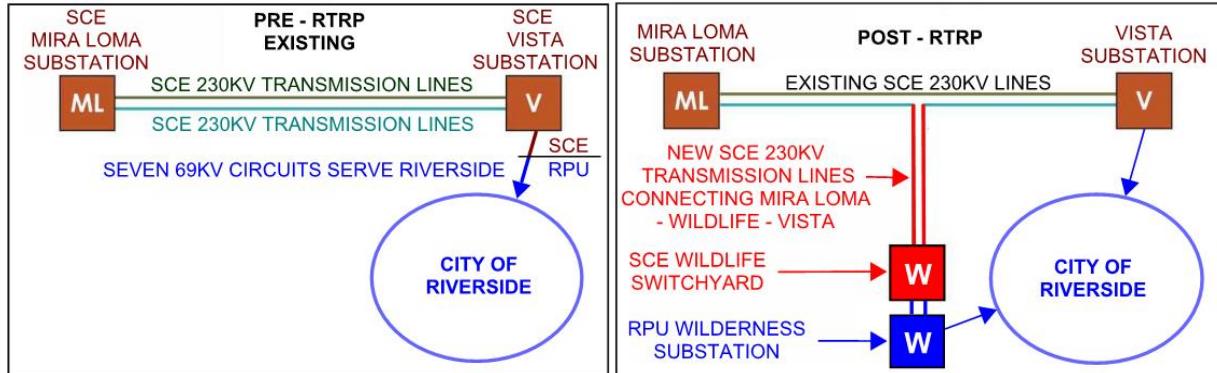


4

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4

RTRP – A SECOND CONNECTION TO STATE GRID



**SINGLE CONNECTION
TO THE STATE GRID**

**TWO CONNECTIONS
TO THE STATE GRID**



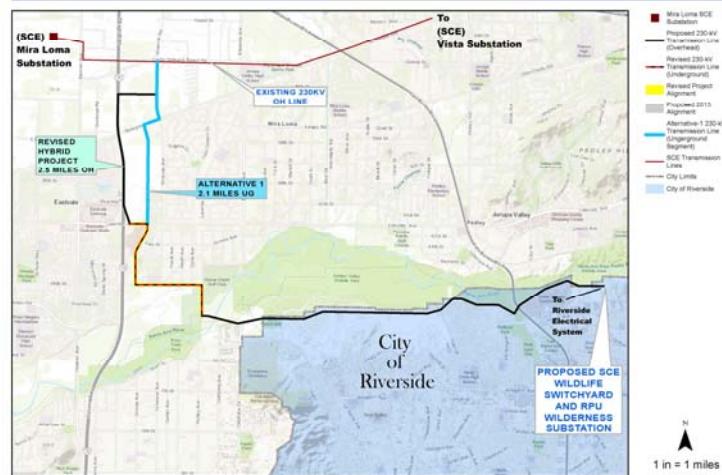
5

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5

SCE - SCOPE OF WORK

Hybrid Project Route + Alternative 1



6

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6



SCE's Portion - Elements of Hybrid Project



Approximately
8 miles of new
overhead
230kV
transmission line



Approximately
2 miles of new
underground
230kV
transmission line



Telecommunication
facilities between the
existing Mira Loma
and Vista Substations,
and the proposed
Wildlife Substation



Modifications of
existing overhead
distribution lines



Modifications
at existing
substations



New 230kV
Wildlife
Substation



7

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7

SCE's Portion - Elements of Alternative 1



Approximately
5.9 miles of new
overhead 230kV
transmission line



Approximately 4.1
miles of new
underground
230kV transmission
line



Telecommunication
facilities between the
existing Mira Loma
and Vista Substations,
and the proposed
Wildlife Substation



Modifications of
existing overhead
distribution lines



Modifications
at existing
substations



New 230kV
Wildlife
Substation



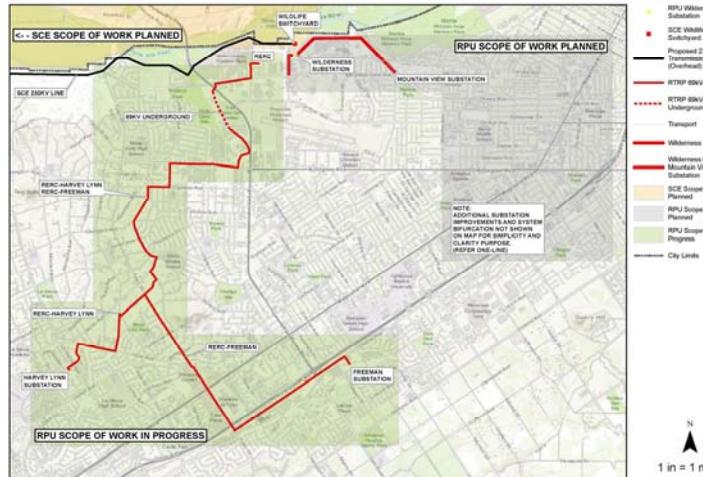
8

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8

RPU – SCOPE OF WORK

City's Portion - 69kV Improvements



9

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9

City's Portion - Elements of Project



Approximately **9 miles** of new **overhead 69kV** sub-transmission lines



Approximately **0.5 miles** of new **underground 69kV** sub-transmission line



New 230/69-kV Wilderness Substation and its integration in RPU system via six new 69-kV overhead sub-transmission line connections (approx. 3 miles)



Modifications of existing system – Improvements and bifurcation



Modifications at existing RPU substations



Telecommunication facilities for Wilderness Substation



10

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10

RPU ELECTRIC SYSTEM BIFURCATION

1. The RTRP project will divide RPU's electric system in two sections:
 - East and West systems
2. The East system will be served from SCE's existing Vista station (in Grand Terrace)
3. The West system will be served from SCE's new Wildlife Station (near Wilderness Avenue and Ed Perkic St. in Riverside)
4. Both systems are designed to operate in parallel under emergency conditions to meet reliability standards if one of SCE source is lost

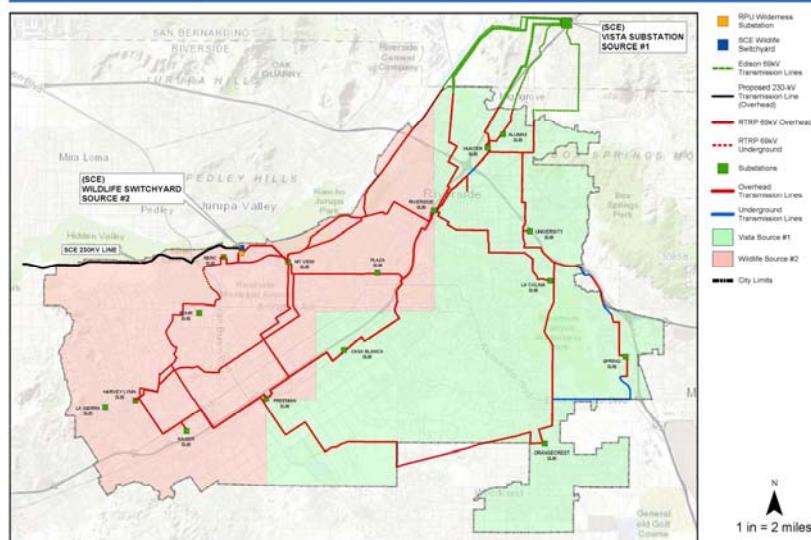


11

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11

Riverside Public Utilities Split Transmission Sources



12

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12

BOARD APPROVED AND IN-PROGRESS COMPONENTS

1. November 25, 2019 - Board authorized an additional \$29,000,000 for RTRP WO 642975 for total amount of \$71,605,521
2. Project components for RPU, not dependent on CPUC approval:
 - a) RERC to Harvey Lynn & RERC to Freeman Sub-transmission lines
 - b) Materials Handling Yard
 - c) Harvey Lynn, Freeman and RERC substation upgrades
 - d) Support for CPCN application related matters and Preliminary design activities for remaining project components



13

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13

BOARD APPROVED AND IN-PROGRESS COMPONENTS (CONTINUED)

3. Total RTRP spending to date is \$ 48.7 Million.

Major Expenses	Description
\$15.4 Million	SCE costs related to CPCN and Interconnection Facility Agreement Activities
\$17.1 Million	Engineering and Consulting services (Legal, Real Estate)
\$8.8 Million	Construction Contracts and related activities
\$7.4 Million	RPU Engineering, Labor, Overhead & Miscellaneous Costs
\$48.7 Million	TOTAL

4. RPU's Reimbursable costs:

- a) Costs of CAISO controlled facilities and costs in support of CPCN and CEQA related activities are subject to reimbursement from SCE per Interconnection Facilities Agreement with SCE
- b) RPU has submitted requests for reimbursement of these costs to SCE in amount of \$21,785,355



14

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14

ADDITIONAL FUNDING AND BOARD APPROVAL FOR PROJECT COMPONENTS

1. March 12, 2020 - CPUC approved RTRP and granted SCE Certificate of Public Convenience and Necessity (CPCN)
2. The work for the following project components will need to commence:
 - a) New 230/69kV Wilderness Substation
 - b) 69kV overhead connections to integrate Wilderness Substation in RPU electric system
 - c) Mountain View, Freeman, Riverside and RERC Substation Upgrades
 - d) 69kV system improvements to support new split system configuration
 - e) Support & Coordinate with SCE's 230kV scope of work
 - f) Regulatory and Compliance matters



15

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15

ADDITIONAL FUNDING AND BOARD APPROVAL PROJECT COMPONENTS (CONTINUE)

3. RPU scope of work for remaining component requires additional funding in the estimated amount of \$144,910,000
4. The \$144,910,000 funds will cover expenses related to:
 - a) Project management and engineering consultant services
 - b) Land Acquisition
 - c) Materials and Construction of new Substation and lines, system improvements and bifurcation
 - d) RPU internal labor, material, and equipment
 - e) Payments for Interconnection Facility Agreement charges with SCE



16

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16

ESTIMATED COSTS

RTRP Project Components	Estimate Total
New Wilderness Substation	\$ 57,711,000
Mountain View Substation upgrades	\$ 1,433,238
Freeman Substation upgrades	\$ 944,638
Riverside Substation upgrades	\$ 685,763
RERC Substation upgrades	\$ 440,000
Telecommunications work	\$ 1,000,000
System Integration of Wilderness Substation (66kV Overhead connections)	\$ 16,900,000
Equipment and Material Yard	\$ 1,470,000
Internal System Improvements to support modified system configuration:	
System Bifurcation and Compliance Matters	\$ 6,000,000
Casa Blanca Substation upgrades	\$ 6,079,613
Orangecrest Substation upgrades	\$ 854,638
Plaza Substation upgrades	\$ 440,000
Kaiser Substation upgrades	\$ 240,000



17

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17

ESTIMATED COSTS (CONTINUED)

RTRP Project Components	Estimate Total
Project Contract/Consultant staff - Labor	\$ 7,500,000
Customer/Community Outreach, General Project Communications	\$ 500,000
Additional legal support	\$ 600,000
IFA - Interconnection Facilities Agreement Payments	\$ 15,935,411
Subtotal	\$ 118,734,301
Contingency (20% of subtotal)	\$ 23,746,860
Adjustments	
Interconnection Facilities Agreement costs up to CPUC approval date of March 12, 2020	\$ 900,000
Adjustment to cover additional contingency for Steel Poles for the RERC - Harvey Lynn line PO#153271	\$ 315,303
Labor costs to support RERC - HL, RERC-FRMN line Construction	\$ 600,000
Adjustment to cover additional 10% contingency for overhead Construction contract and materials for RERC-FRMN	\$ 613,000
Total	\$ 144,909,464



18

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18

PROJECTED CASH FLOW/SPENDING BY FISCAL YEAR

Estimated Cash Flow Needs by Fiscal Year	
Fiscal Year	Funding for Planned Expenses
FY 2020-2021	\$ 43,363,827
FY 2021-2022	\$ 45,043,883
FY 2022-2023	\$ 30,607,687
FY 2023-2024	\$ 13,619,587
FY 2024-2025	\$ 11,207,112
FY 2025-2026	\$ 1,067,368
Total	\$144,909,464



19

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19

SUPPLEMENTAL APPROPRIATION

1. A supplemental appropriation of \$125,000,000 to Account No. 6130000-470685 is needed to fund the \$144,910,000 for construction of remaining RTRP project components
2. August 24, 2020, the Board of Public Utilities, with seven members present, unanimously recommended that the City Council approve a supplemental appropriation of \$125,000,000 from Electric Fund
3. The City's FY 2020/2021 Emergency Budget was a direct result of the COVID-19 pandemic and did not allow for the regularly scheduled budget conversations and approval requests to increase the Capital Improvement Budget
4. When the City's Capital Improvement Budget is next reviewed, this supplemental appropriation will be included for the Project



20

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20

RECOMMENDATION

That the City Council approve a supplemental appropriation in the amount of \$125,000,000 to RTRP Account No. 6130000-470685 from the Electric Fund (Fund 510) for Riverside Transmission Reliability Project components, including Wilderness Substation, line work, and associated components as presented herein.



21

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