



City Council Memorandum

City of Arts & Innovation

.....

TO: HONORABLE MAYOR AND CITY COUNCIL DATE: JANUARY 26, 2021

FROM: PUBLIC UTILITIES DEPARTMENT WARDS: ALL

**SUBJECT: SUPPLEMENTAL APPROPRIATION OF \$125,000,000 TO RECEIVE THE
SECOND TRANSMISSION CONNECTION TO STATE GRID – RIVERSIDE
TRANSMISSION RELIABILITY PROJECT**

ISSUE:

Approval of a supplemental appropriation of \$125,000,000 for the Riverside Transmission Reliability Project, for construction of the City-owned portion of the project. The project includes a new 230/69kV Wilderness Substation, integration of new Wilderness Substation via six new 69kV connections, transmission line upgrades, electric system bifurcation, existing substation improvements, related environmental matters, and associated components.

RECOMMENDATION:

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

BOARD RECOMMENDATION:

On 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 to Account No. 6130000-470685 to be funded from the Electric Fund (Fund 510) for Riverside Transmission Reliability Project components, including Wilderness Substation, line work and associated components.

BACKGROUND:

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

On February 5, 2013, the City Council certified the Final Environmental Impact Report (FEIR) for the entire RTRP Project, in accordance with California Environmental Quality Act (CEQA) requirements. A Notice of Determination was filed with the County of Riverside following the certification by the City Council.

On March 12, 2020, SCE obtained California Public Utilities Commission (CPUC) approval of RTRP (Attachment 1) and was granted a Certificate of Public Convenience and Necessity (CPCN). 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 Station. SCE’s estimated costs for the RTRP Project as allowed by CPUC is not to exceed \$521 million.

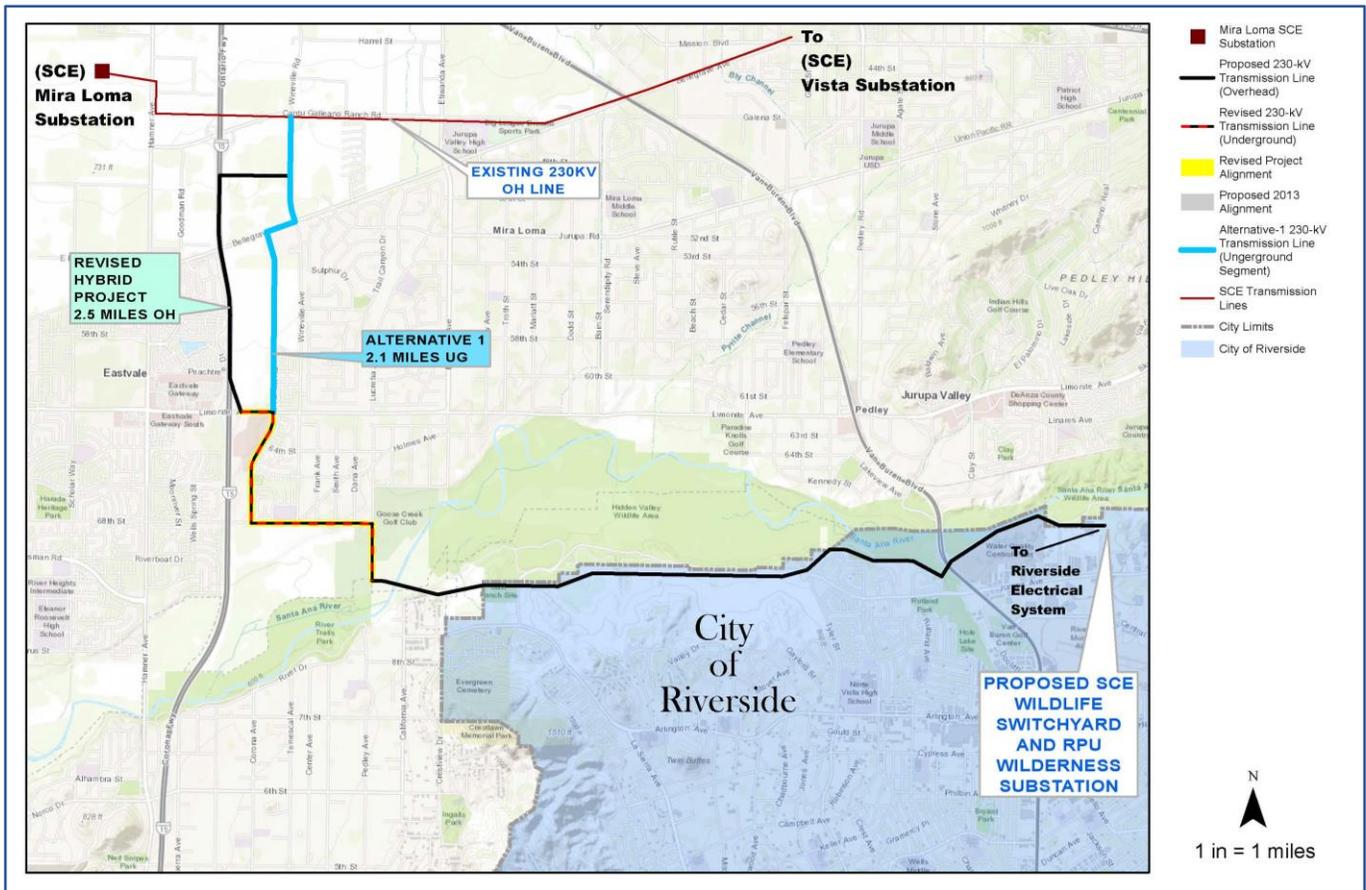


Figure: RTRP – SCE Scope of Work

RPU will support the 230kV project coordination in collaboration with SCE. RPU is leading the scope of work for the new 230/69kV RPU Wilderness Substation and expansion of RPU’s 69kV sub-transmission system.

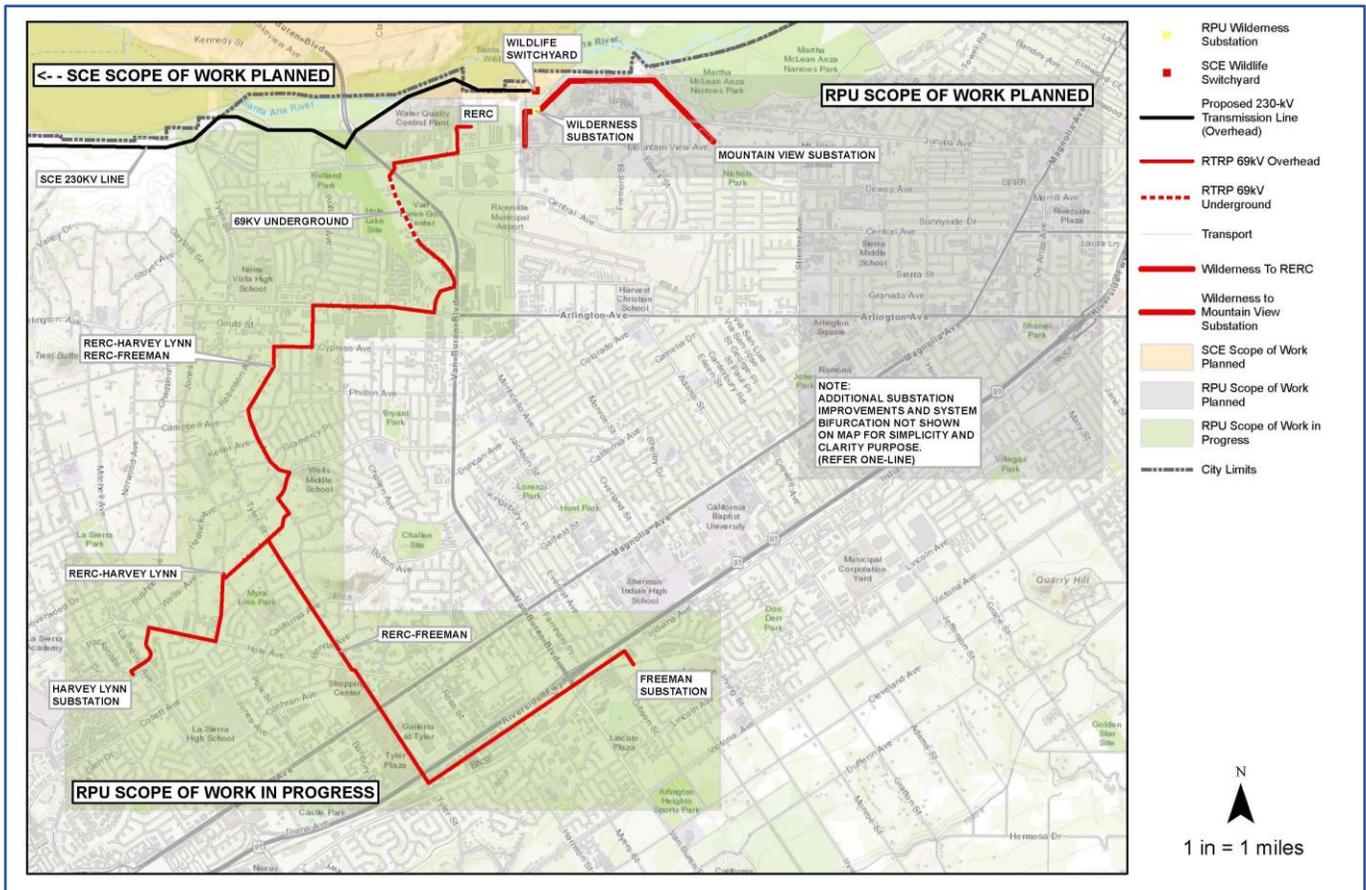


Figure: RTRP – RPU Scope of Work

RPU’s 69kV sub-transmission system scope of work that was not dependent upon CPUC project approval involved the following components for which design and construction related activities were approved by RPU Board and are currently in progress:

1. Construction of two 69kV lines: 1) Riverside Energy Resource Center (RERC) to Harvey Lynn Substation; and 2) RERC to Freeman Substation, including approximately half-mile of underground work in the vicinity of the Riverside Municipal Airport.
2. Construction of a material yard to support construction activities and material handling.
3. Substation upgrades at Harvey Lynn, Freeman, and RERC to connect the 69kV lines, including the reconfiguration of related 69kV sub-transmission lines and distribution circuits.
4. Support for SCE’s CPCN application related matters as defined in the Interconnection Facilities Agreement (IFA), CEQA matters per the FEIR, and preliminary design activities for remaining project components.

The table below lists the most recent Board approval to date related to the 69kV sub-transmission system scope of work and related components:

Item	Board Meeting Date	Project Component Status
RTRP Approval and Work Order No. 642975	01/20/06	N/A
Board Approval Bid No. RPU-7659 Installation of conduit and structures 69kV RERC to Harvey Lynn Underground line segment	06/24/19	Complete
Board Approval Bid No. RPU-7680 Construction of 69kV Material Yard	08/26/19	Complete
Board Approval Bid No. RPU-7711 Drilled Pier Foundation work for steel poles RERC to Harvey Lynn 69kV line	11/25/19	Complete
Board Authorized an increase in funds for Work Order No. 642975 69kV Scope of Work – RERC to Harvey Lynn & RERC to Freeman \$42,605,521 to \$71,605,521	11/25/19	N/A
Board Authorized an increase of \$144,910,000 in funds for Work Order No. 642975 for a total work order amount of \$216,515,521 pending City Council approval of a supplemental appropriation of \$125,000,000 for the RTRP Project.	08/24/2020	N/A
Bid No. RPU-7772 RERC to Harvey Lynn Substation Overhead Line work	10/26/2020	Notice to Proceed Pending; Construction to mobilize January 2021

Additional work for construction of RERC to Harvey Lynn and RERC to Freeman transmission lines is in the design and bidding phase, with a projected construction completion date of Fall 2022.

The RPU project components that were dependent on the CPUC approval are listed below:

1. Construction of a new 230/69kV RPU Wilderness Substation;
2. Construction of six (6) 69kV overhead line connections to integrate the new RPU Wilderness Substation to RPU’s electric system;
3. Upgrades to existing RPU substations at Mountain View, Freeman, Riverside and RERC to connect the 69kV lines;
4. 69kV system improvements to support the new system configuration and system bifurcation as determined by sub-transmission and distribution system studies;
5. Project Management support/coordination related to SCE’s 230kV scope of work; and
6. Regulatory and Compliance matters.

Since the 1970s, RPU has owned the property for the proposed Wilderness Substation site near the northeasterly corner of Wilderness Avenue and Ed Perkić Street for this very purpose. SCE’s 230kV interconnection switchyard (the Wildlife Substation) will be constructed immediately adjacent to RPU’s 230/69kV station at that site. The tenant at the site was notified regarding the termination of their lease due to the proposed substation construction and the site has now been vacated. The overall RTRP project is currently scheduled to be completed in 2026.

The City has started the construction of the RERC to Harvey Lynn and RERC to Freeman sub-transmission lines (69kV scope of work within the City of Riverside). The remaining balance of funds for the approved work order will cover ongoing construction activities of these components, including, but not limited to project management, pre-construction environmental surveys, easements, detailed engineering plans and specifications for the line/substation work, procurement of construction contract services, materials and equipment, and Joint Pole Agreement transfers with 3rd party pole attachment telecommunication companies. The remaining scope of work for RTRP components is currently in the planning stage.

The RTRP project will divide RPU’s electric system in two sections: East (Vista Source #1) and West (Wildlife Source #2) subsystems (see figure below). The East subsystem will be served from SCE’s existing Vista Substation and the West System will be served from SCE’s proposed Wildlife Substation. Both subsystems can be operated in parallel under emergency conditions to meet the reliability goals when there is a loss of one of the SCE sources. Cost estimates were provided for system improvement requirements as part of the new system reconfiguration scope of work, which is subject to ongoing and future planning study results.

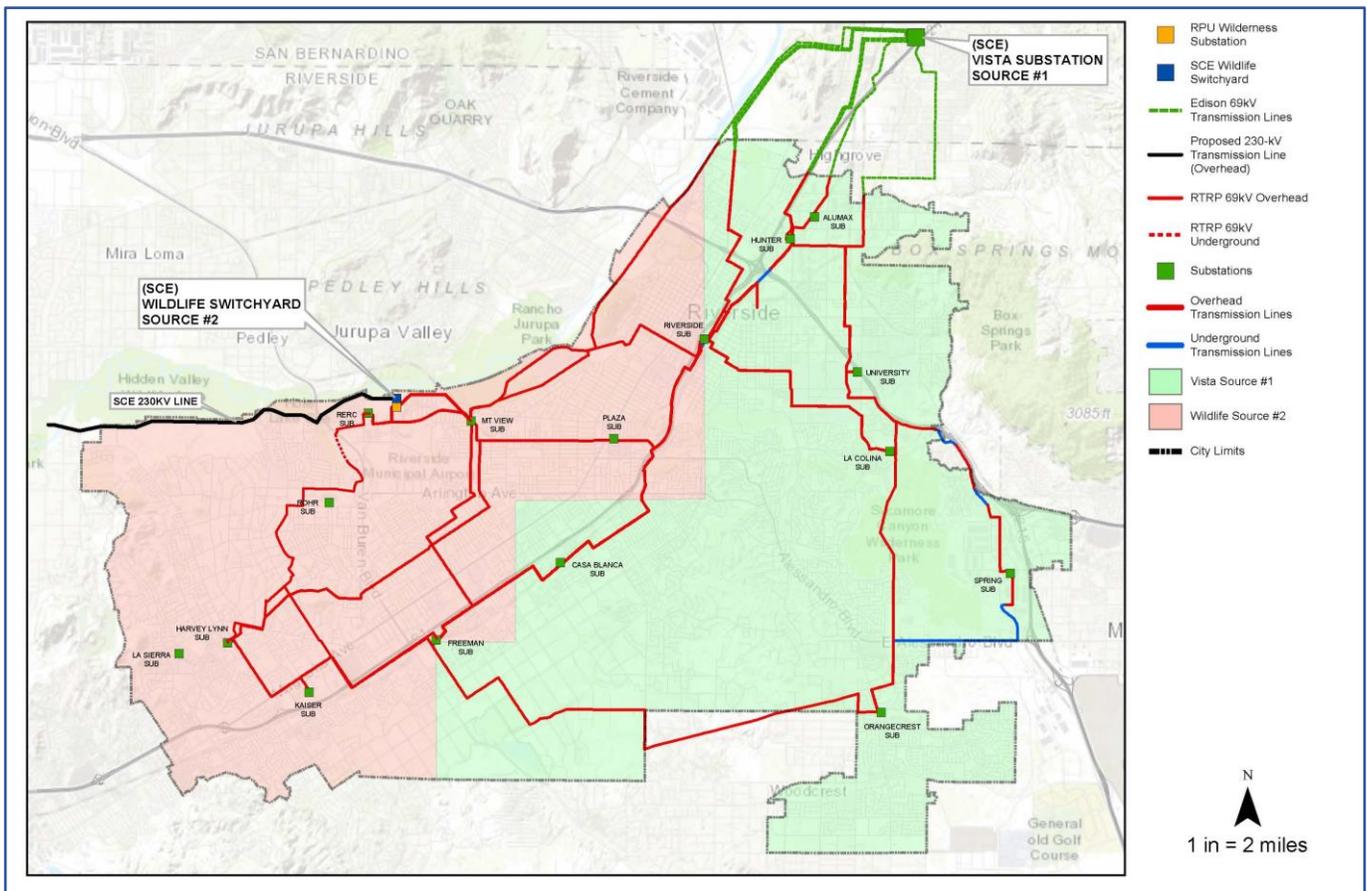


Figure: RTRP System One-line showing Two Transmission Sources and System Bifurcation

DISCUSSION:

RPU’s project cost estimation, as approved by City Council in 2006, has changed significantly over the last 15 years. On February 3, 2012, the Board received a revised estimate for RPU’s scope of work in the estimated amount of \$137,000,000. RPU staff revised the cost estimates based on final project scope and determined that additional funding is needed to complete the remaining RPU scope of work.

On March 12, 2020, the CPUC granted SCE a Certificate of Public Convenience and Necessity (CPCN), which cleared the way for the 230KV portion of the RTRP Project, which will be designed, constructed, and operated by SCE. Additional funding is required for right-of-way acquisition, design, material procurement, and construction activities of remaining project components including the new 230/69kV RPU Wilderness Substation, 69kV line connections to integrate Wilderness Substation in RPU’s electric system, and 69kV system improvements to support the revised split system configuration including work at multiple substations.

Increase Work Order No. 642975

On August 24, 2020, RPU Board approved an additional \$144,910,000 for RTRP Work Order No. 642975 for a total cost of \$216,515,521 to fund the remaining project components that were dependent upon CPUC approval (pending City Council approval for funds). These components include: cost of management/engineering services, RPU internal labor, consultant services, land acquisition, utility relocations, substation materials (including large transformers, control house and major equipment) and construction, sub-transmission & communication line materials, construction, and payments to SCE for Interconnection Facility charges.

Consistent with the Third Amendment to the Interconnection Facilities Agreement (IFA) between SCE and RPU (Attachment 2) as approved by Board and City Council in December 2018, RPU is obligated to pay the remaining contractual payments in the amount of \$15,935,411. Due to the extension of the RTRP Project schedule, the IFA will likely be revised, and additional expenditures not yet determined will likely be required later. Any subsequent revisions to the IFA will be presented to the City Council and the Board of Public Utilities for consideration.

The Board approved work order increase addresses the following project components and 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
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

Cash Flow for RTRP Project

The total RTRP Project spending to date (preliminary numbers as of November 30, 2020) is \$48.7 million.

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

The table below demonstrates the annual project funding expectations for the remaining RTRP Project components until the scheduled project completion date of 2026.

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

The current available balance of RTRP Project accounts 470685 and 470686 as of November 30, 2020 is \$20,274,417.

The City's costs of the California Independent System Operator (CAISO) controlled facilities and costs incurred in support of CPCN and CEQA related activities were subject to reimbursement from SCE per the Interconnection Facilities Agreement. RPU has requested and received reimbursement of these costs totaling \$21,785,355 from SCE.

The financial plan to fund the required \$144,910,000 is as follows:

1. Deposit the reimbursement from SCE in the amount of \$21,785,355 into the Unrestricted, Undesignated Cash Reserve;
2. Fund the RTRP Project with the Electric Reliability Reserve or with bond proceeds; and
3. Use the Electric Reliability Reserve to fund any debt service payments associated with the use of bond proceeds.

This funding plan provides the most flexibility for RPU to monitor cash balances, maintain liquidity, and meet any unplanned cash flow impacts as a result of the COVID 19 pandemic.

Supplemental Appropriation

A supplemental budget appropriation in the amount of \$125,000,000 from Account No. 6130000-470685 is needed to fund the \$144,910,000 increase for Work Order No. 642975 to meet the project costs. These funds are available in the Electric Fund (510 Fund). 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 on the Capital Improvement Budget. When the City's Capital Improvement Budget is next reviewed, this supplemental appropriation will be included for the Project.

FISCAL IMPACT:

The supplemental appropriation of \$125,000,000 from the Electric Fund (510 Fund) to the RTRP Project Account No. 6130000-470685 is required for construction of RTRP components, including a new 230/69kV Wilderness Substation, 69kV line connections to integrate the new Wilderness Substation into RPU's electric system, 69kV system improvements to support modified split system configuration and support functions for 230kV project coordination.

Prepared by: Todd M. Corbin, Utilities General Manager
Certified as to
availability of funds: Edward Enriquez, Chief Financial Officer/City Treasurer
Approved by: Al Zelinka, FAICP, City Manager
Approved as to form: Kristi J. Smith, Chief Assistant City Attorney

Attachments:

1. CPUC Final Decision
2. Interconnection Facilities Agreement with SCE – 3rd Amendment
3. Riverside Public Utilities Board Meeting Minutes 08/24/2020
4. Presentation