



RIVERSIDE TRANSMISSION RELIABILITY PROJECT

Fatal Flaw Analysis Summary

City Council
November 15, 2022

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FIRM OVERVIEW

California Strategies, LLC, is a full-service public affairs consulting firm with **extensive** experience and expertise in the **energy sector**



Steve Larson, Partner

Steve Larson brings broad experience in the energy regulatory field as well as state budgetary policy and corporate matters

In the past, Steve has served as:

- Executive Director for the CPUC
- Executive Director of CEC
- President of Woodside Natural Gas of California

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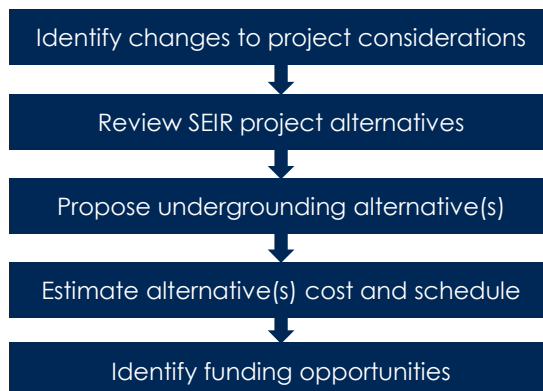
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STUDY OBJECTIVE

RPU has elected to evaluate constructing the entirety or a portion of an approximately **5-mile** 230-kV section of the RTRP using methods of **undergrounding**

The purpose of this study is to provide information to RPU decision makers regarding **undergrounding options, impacts, and potential paths to implementation**

Study Process



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PROJECT BACKGROUND



RTRP History

2004: Riverside requests SCE to develop second interconnection

2006: CAISO approves RTRP

2013: Final EIR certified

2015: SCE submits CPCN application

2016: SCE revises RTRP CPCN to underground through Jurupa Valley

2018: Subsequent EIR certified

2020: CPUC issues CPCN for RTRP

2022: Jurupa Valley grants SCE the underground easement

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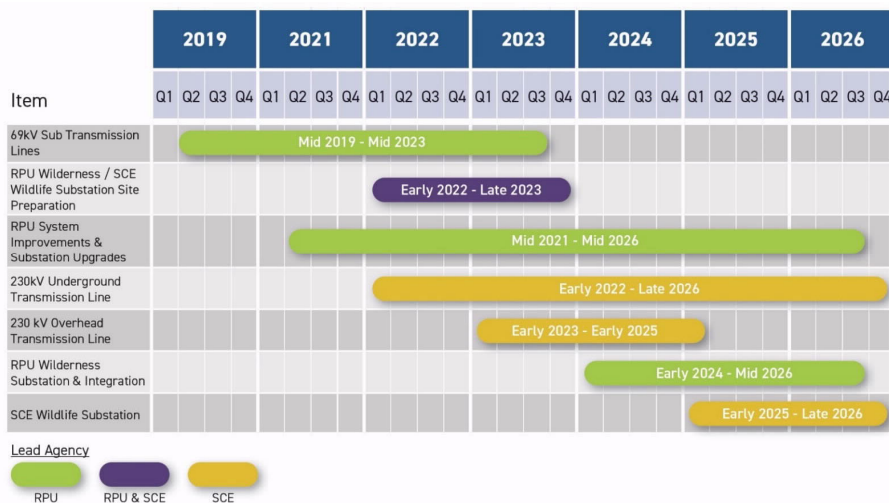
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PROJECT STATUS



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PROJECT CONSIDERATIONS

Utility-Driven Wildfires

From 2014-2017, electrical utility failure only contributed to 9% of wildfire ignitions, but disproportionally accounted for **42% of acreage burned** in California



Dixie Fire (2021): 960,000 acres burned; \$1.15B in estimated losses; caused by a fallen tree contacting a PG&E distribution line

Thomas Fire (2017): 282,000 acres burned; \$171M in estimated losses; caused by high winds that forced SCE distribution lines to contact each other

Camp Fire (2018): 153,335 acres burned; \$10B estimated losses; caused by PG&E electrical transmission failure

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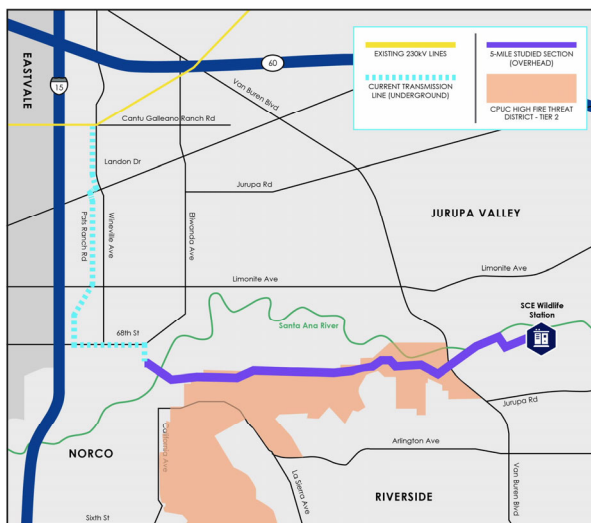
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PROJECT CONSIDERATIONS

The studied overhead 5-mile section of the 230-kV transmission runs adjacent to and through a **CPUC Tier 2 High Fire Threat District**

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Documented wildfires in the project area from 2017 - 2022



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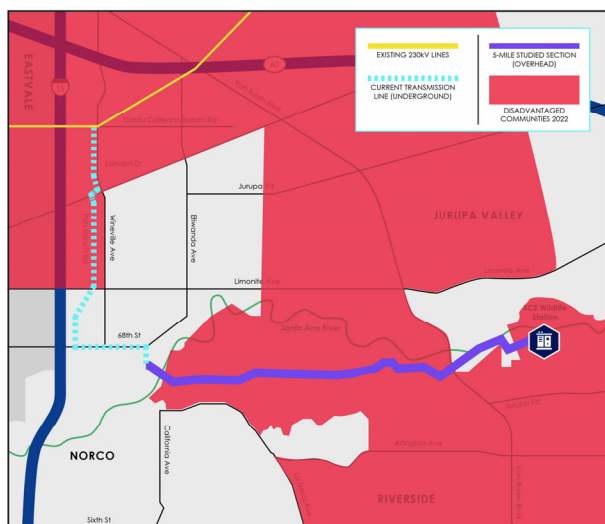
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PROJECT CONSIDERATIONS



Social Justice

When placed in residential zones, high voltage overhead lines **elevate fire risk**, **lower property values**, and **detract from environmental aesthetics**

Low-income communities are **disproportionately affected** by industrial development

- City of Jurupa Valley successfully argued for undergrounding based on social justice
- Current 5-mile portion of overhead lines travels through a statutorily designated **Disadvantaged Community**

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PROJECT CONSIDERATIONS



Environmental Aesthetics

The Alternative #1 route traverses the Hidden Valley Wildlife Area (HVWA), land that is designated for **open space** and **recreational use**.

The City of Jurupa Valley urged the City to reevaluate undergrounding through the HVWA, especially since the SEIR recognizes it as the **environmentally superior option**.

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INDUSTRY TRENDS

In 2021, PG&E PLEDGED
TO UNDEGROUND **10,000**
MILES OF POWERLINES

Recent Undergrounding Projects

LADWP, 2018:

- 11.4-mile 230-kV underground transmission line
- Replaces aging power infrastructure

City of Chino Hills, 2013:

- 3.7-mile 500-kV underground transmission line
- Reduces impact of OH lines on residents

City of San Diego, 2018:

- 15-mile 230-kV underground transmission line
- Improves reliability, safety, and visual aesthetics

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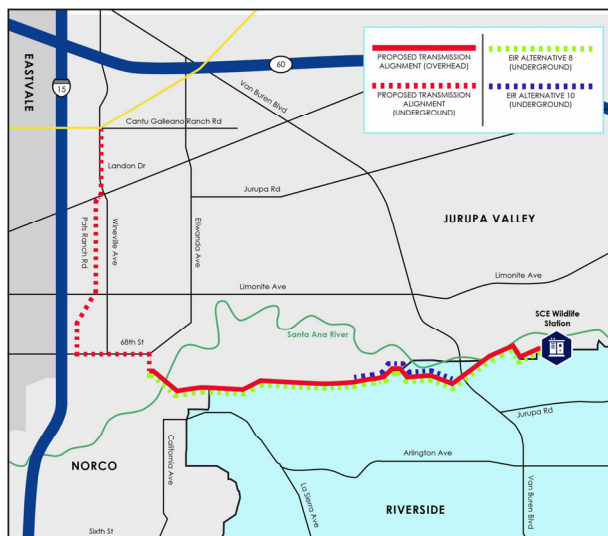
PREVIOUSLY IDENTIFIED ALTERNATIVES

Of the 30 alternatives reviewed in the 2018 Subsequent EIR, **2** followed the same path as the current Alternative #1 route

SEIR Alternative 8: All 5 miles of study area undergrounded

SEIR Alternative 10: Of the 5-mile portion of the RTP:

- 1 mile underground
- 4 miles overhead



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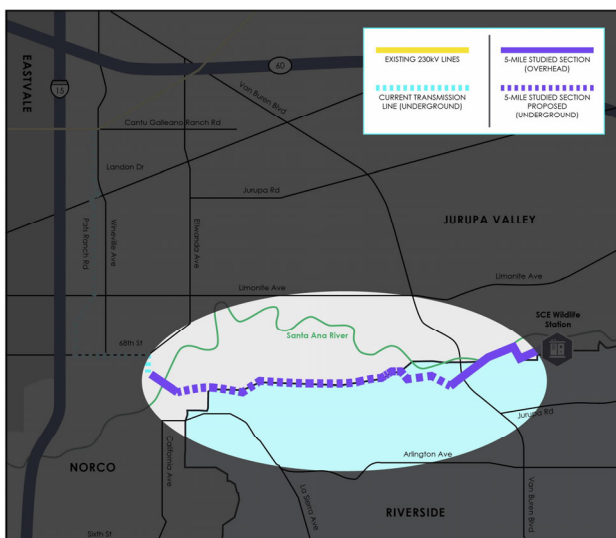
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PROPOSED HYBRID ALTERNATIVE



Approximately **3.5 miles** of underground and **1.5 miles** of overhead lines

The Hybrid Alternative incorporates **already assessed** elements from SEIR Alternative 8 and 10

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ALTERNATIVE DECISION MATRIX

	Social Justice	Environmental Aesthetics	Risk Mitigation	Environmental Protection
Alternative #1				✓
EIR Alternative 8	✓	✓	✓	
EIR Alternative 10	✓	✓		✓
Hybrid Alternative	✓	✓	✓	✓

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COST ESTIMATE

Item	Alternative #1	Hybrid Alternative	SEIR Alternative 8	SEIR Alternative 10
Underground Length	4.1 mi	7.5 mi	9.9 mi	5.1 mi
Overhead Length	5.8 mi	2.4 mi	0 mi	4.8 mi
Total Cost	\$521 M	\$742 M	\$896 M	\$584 M
Percent Over Baseline	0%	42%	72%	12%

Note: Estimates are derived from SCE Estimate (2018)

SCE estimates the financial impact of underground lines at **\$59.7M / mile**, which is high compared to other similar projects.

For example, LAWDP's 11.4-mile Underground Transmission Project cost **\$11.40 M / mile**.

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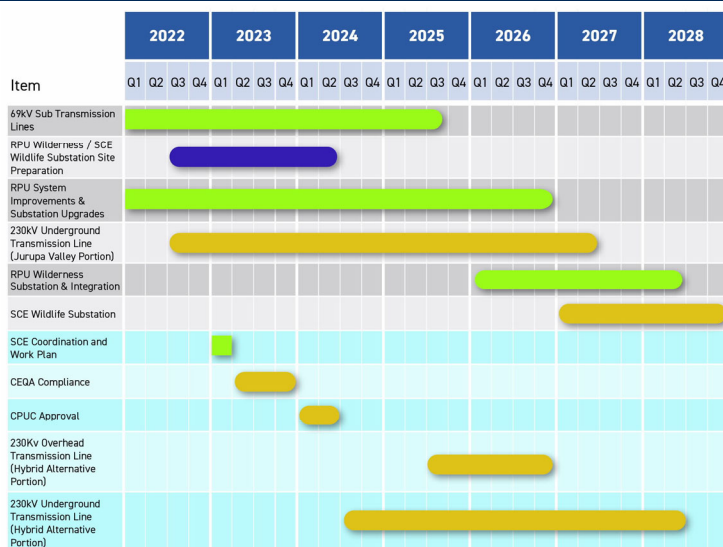
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ANTICIPATED PROBABLE SCHEDULE



The proposed Hybrid Alternative route could add an additional **2 years** to project completion

Task relationships from the existing City schedule were kept intact and a 6 month slip on ongoing tasks was assumed.

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SOURCES OF FUNDING

Transmission Access Charge (TAC)

The TAC provides **cost recovery** for Participating Transmission Owners (PTO) and each PTO is authorized to recover an annual amount equal to the Transmission Revenue Requirement ("TRR") approved by the FERC

Other Funding Sources:

- Federal funding on pilot basis
- State funding
 - California Energy Commission (CEC)
 - State budget process

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MODIFICATION PROCESS

Step #1: Resolution and Task Force Creation

- Riverside City Council approves a Resolution in support of the undergrounding alternative selected and creates a Task Force
- This Task Force includes at a minimum, a representative of the Council, the City, and RPU, with others as needed
- Assign a Task Force Administrator selected through a competitive process that is capable of advising the Task Force

Step #2: Organizational Efforts

- Create a coalition of local and state elected officials that support the RTP
- Establish working relationship with SCE
- Contact CAISO and FERC to identify approvals needed
- Establish work plan to meet requirements of SCE and agency relationships
- Develop pre-construction schedule

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MODIFICATION PROCESS

Step #3: Funding Source Identification

- Confirm applicability of Transmission Access Charge (TAC) cost recovery towards new project modifications
- Explore unconventional funding sources such as pilot programs

Step #4: CEQA Investigation

- Identify modification's new environmental impacts and select appropriate variation of EIR
- Complete Draft EIR, follow notice and review process, and complete Final EIR

Step #5: CPCN Petition of Modification

- Assist SCE as needed with preparation of Petition of Modification for CPUC
- Provide SCE with completed EIR, completed agency approvals, and identified funding sources

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