



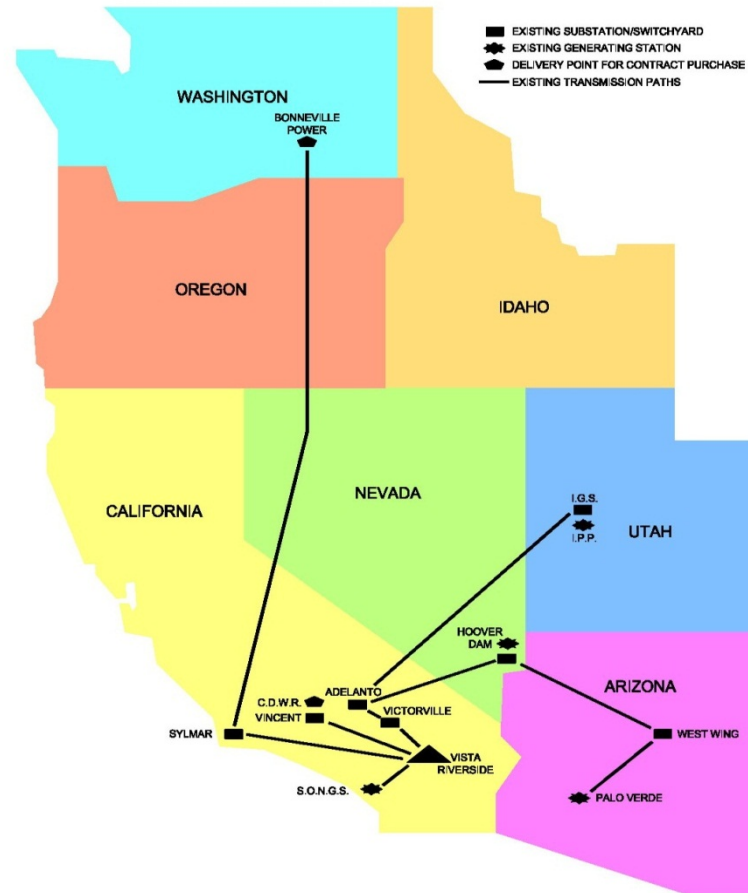
Arts & Innovation

Riverside Transmission Reliability Project

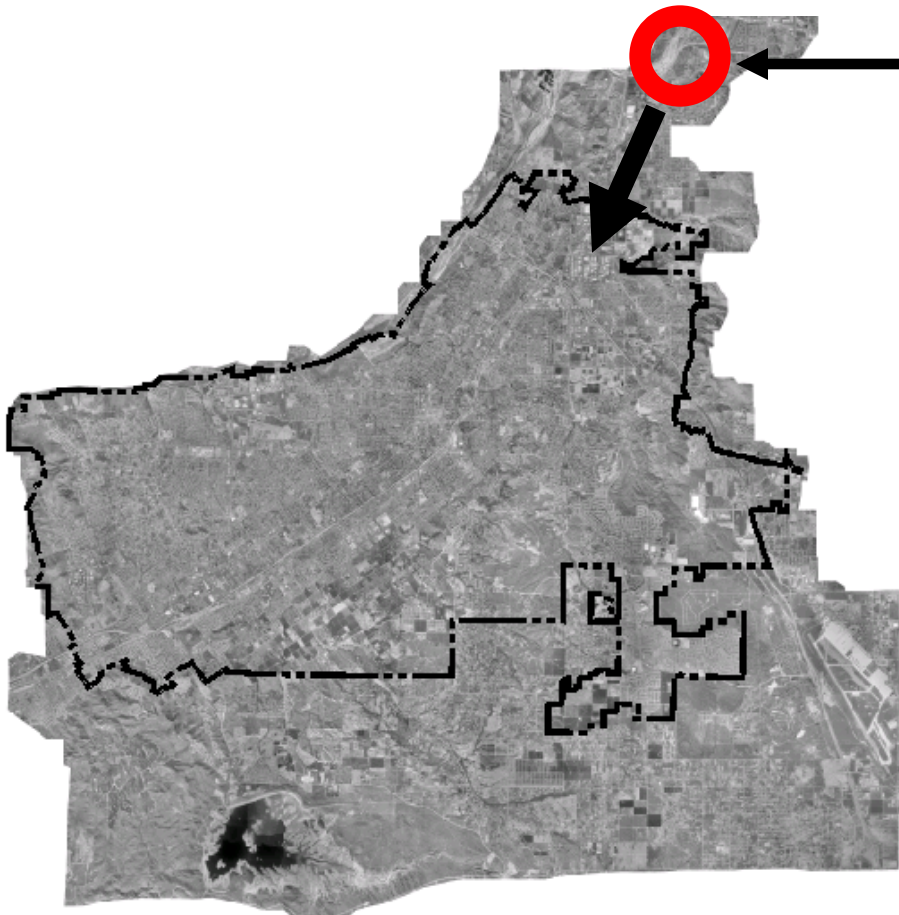
Board of Public Utilities

September 20, 2013

RPU Generation and Transmission Resources

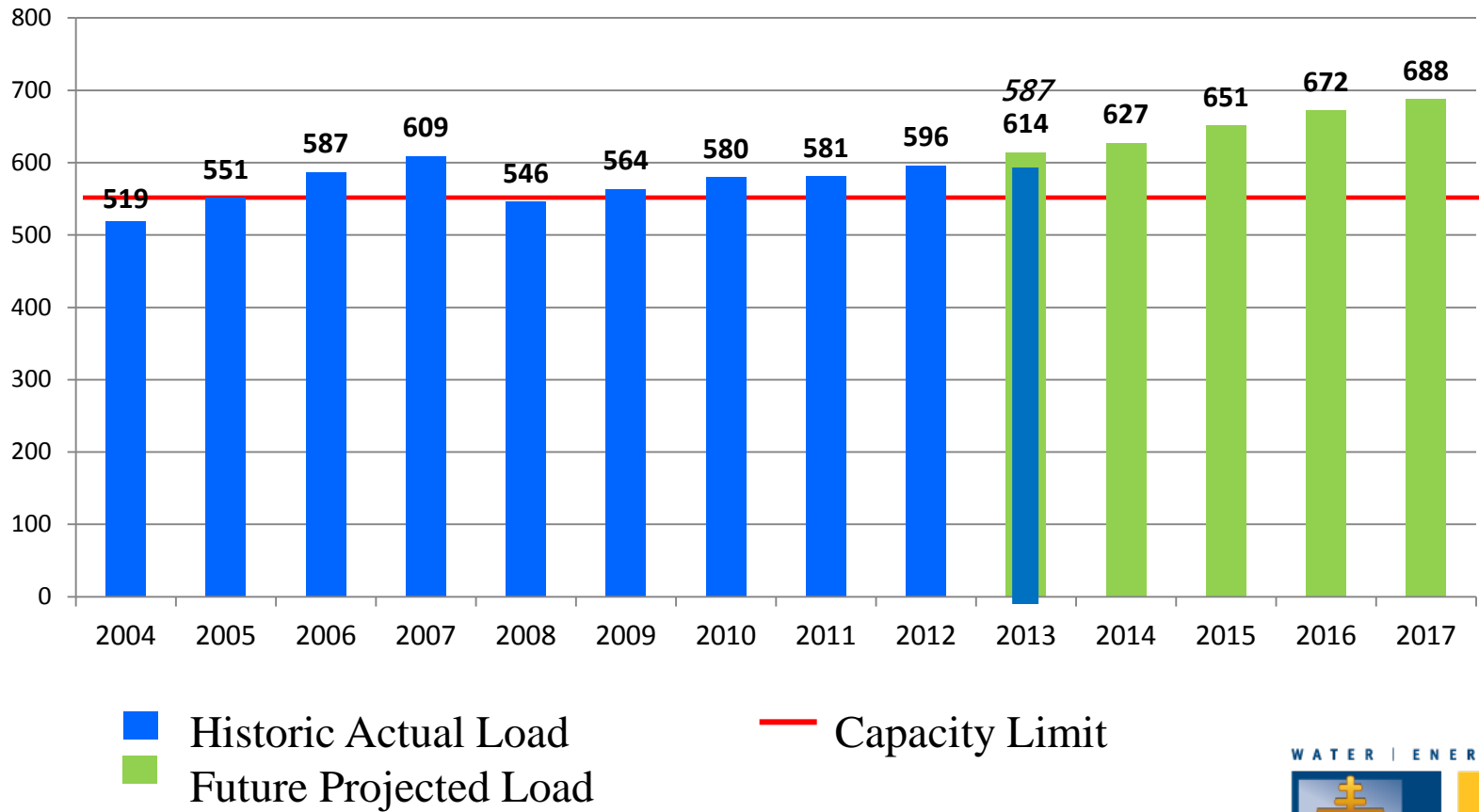


Energy Delivery to RPU



- SCE's Vista Substation
- 557 MW
- At capacity limit

RPU Historic and Projected Load in Megawatts



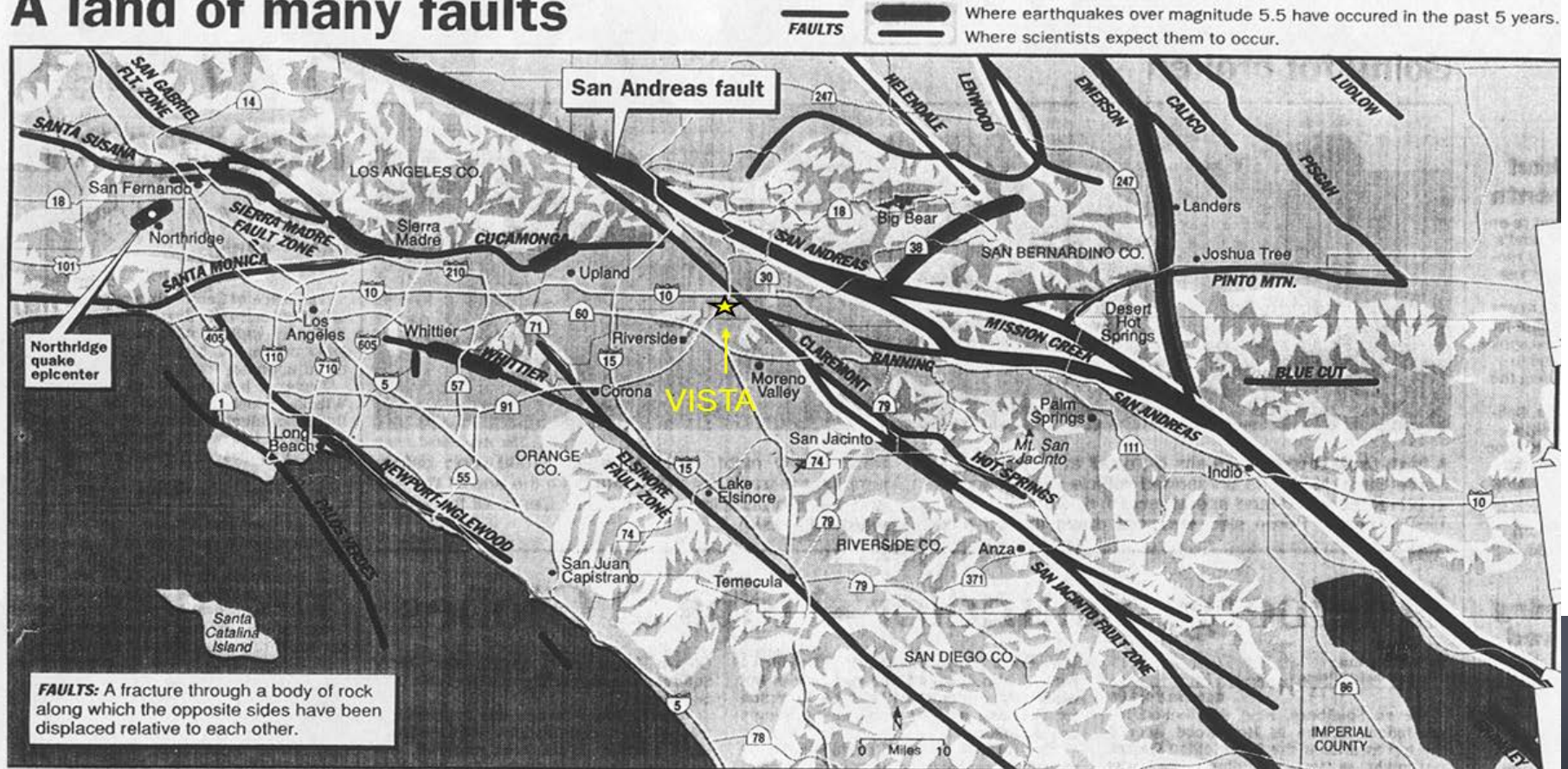
Most Probable Vista Event?

A-4 • Sunday, January 23, 1994 • THE PRESS-ENTERPRISE



THE NORTHRIDGE QUAKE

A land of many faults



Vista Substation



Catastrophic Failure Arizona Public Service



SCE Vincent Substation – March 2003



An Urgent Need!

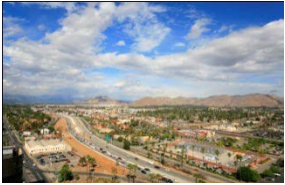


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- CAISO – build 2nd source ASAP
- Total black-out October 2007
- Interrupted power to:
 - All Riverside Public Utilities customers
 - Schools
- And regional service providers:
 - Universities
 - Government
 - Hospital facilities

Riverside Transmission Reliability Project (RTRP)

- Joint Project with SCE
- City of Riverside Lead Agency
- Second connection to the state transmission grid:
 - 230 kV Transmission Line (SCE)
 - Appx. 9 miles long
 - Through Riverside, Norco, Jurupa Valley, and Riverside County
 - 230-69 kV Substations (Joint)
 - Two adjacent stations in the City of Riverside
 - 69 kV Sub-transmission Lines (RPU)
 - Entirely within the City of Riverside

Regional Benefits



- Adds nearly 560 MW of capacity
 - Frees up capacity for regional SCE customers
- Provides transmission for renewables
- Ensures reliable power supply to critical facilities - services benefit beyond city limits
- Strengthens the reliability of the state transmission grid serving the region
 - Emergency generation back to State Grid
 - Additional transmission paths

Regional Benefits *(continued...)*

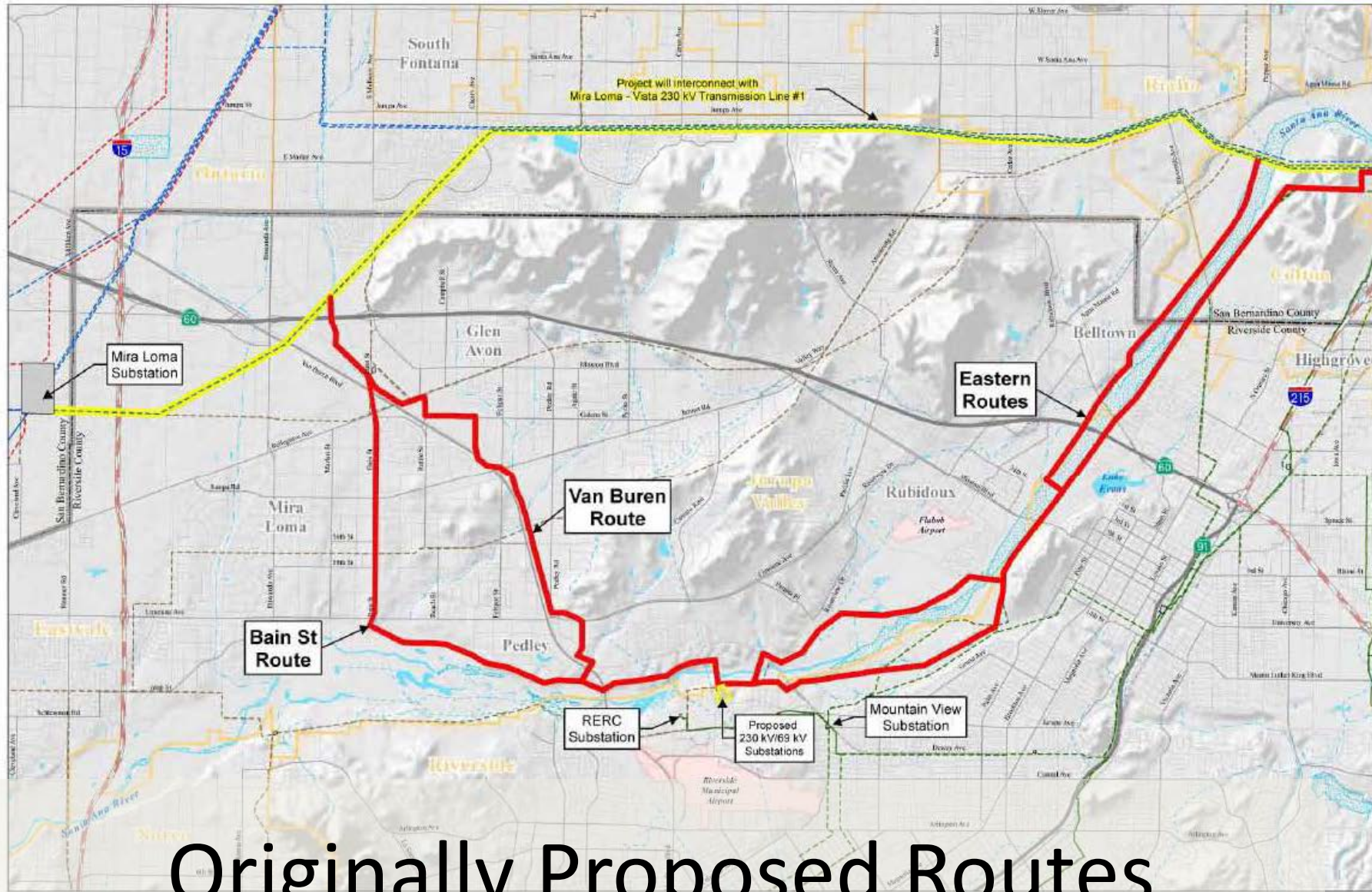
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Route Selection Process

- Technical review analyzing all possible routes
- Evaluation using multiple criteria including:
 - Public Comment
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 - Operation and Maintenance Activities
 - Cost
 - Right-of-Way
 - Regulatory Approvals

FIGURE 6.2-2. INITIAL 230 kV ALTERNATIVE ROUTES

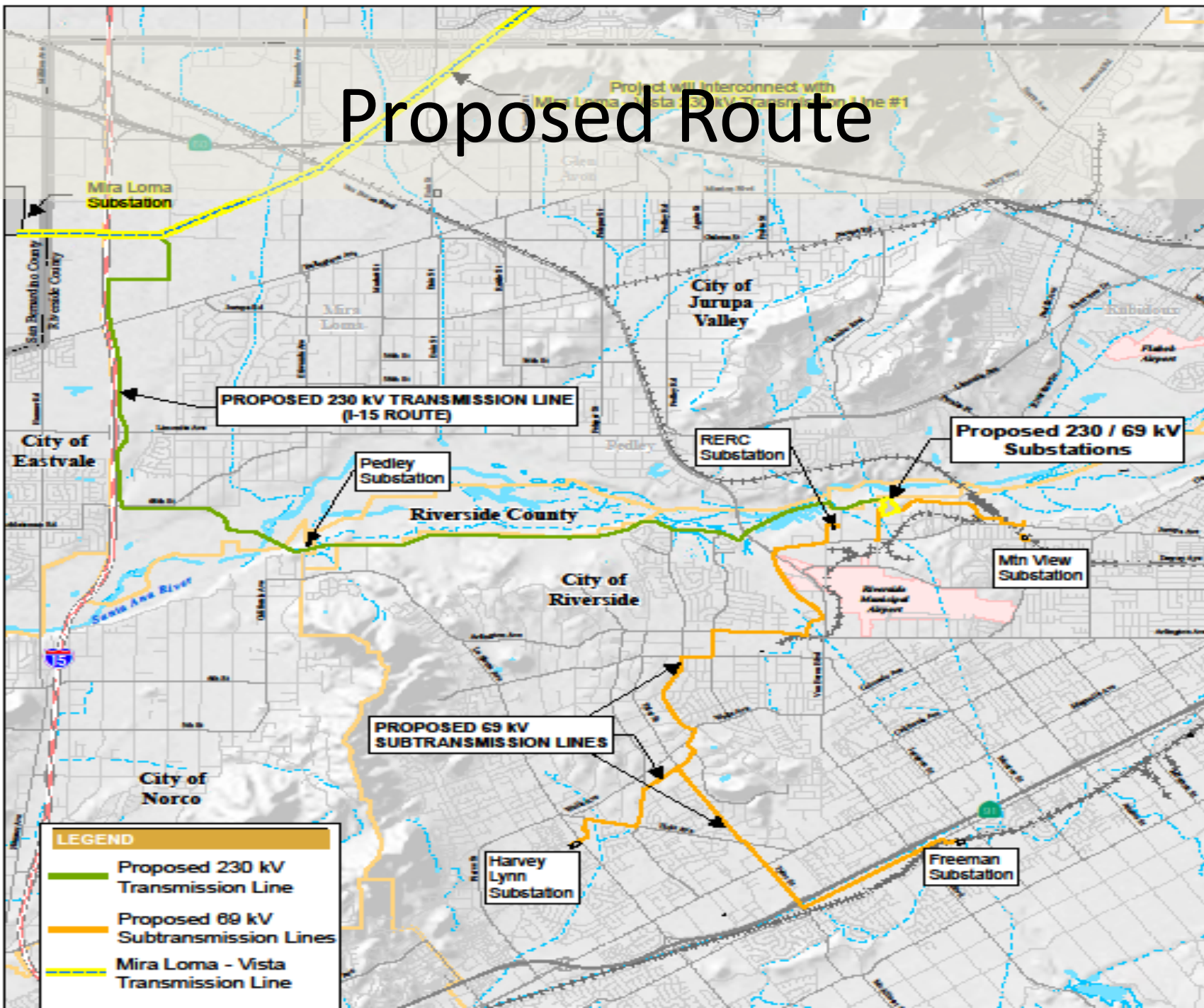
Initial 230



Originally Proposed Routes



Proposed Route



Eastern (Santa Ana River) Route

- Creates adverse impacts to land use, protected species, riparian habitat, wetlands, and the Santa Ana River floodway.
- Line would extend across special management areas known as Criteria Cells, which are important areas to conserve for special-status species.
- A take permit under the federal Endangered Species Act (ESA) would likely be required.
- Alternative would also exit out of the Riverside County Multi-Species Habitat Conservation Plan (MSHCP) territory.

Eastern Route *(continued...)*

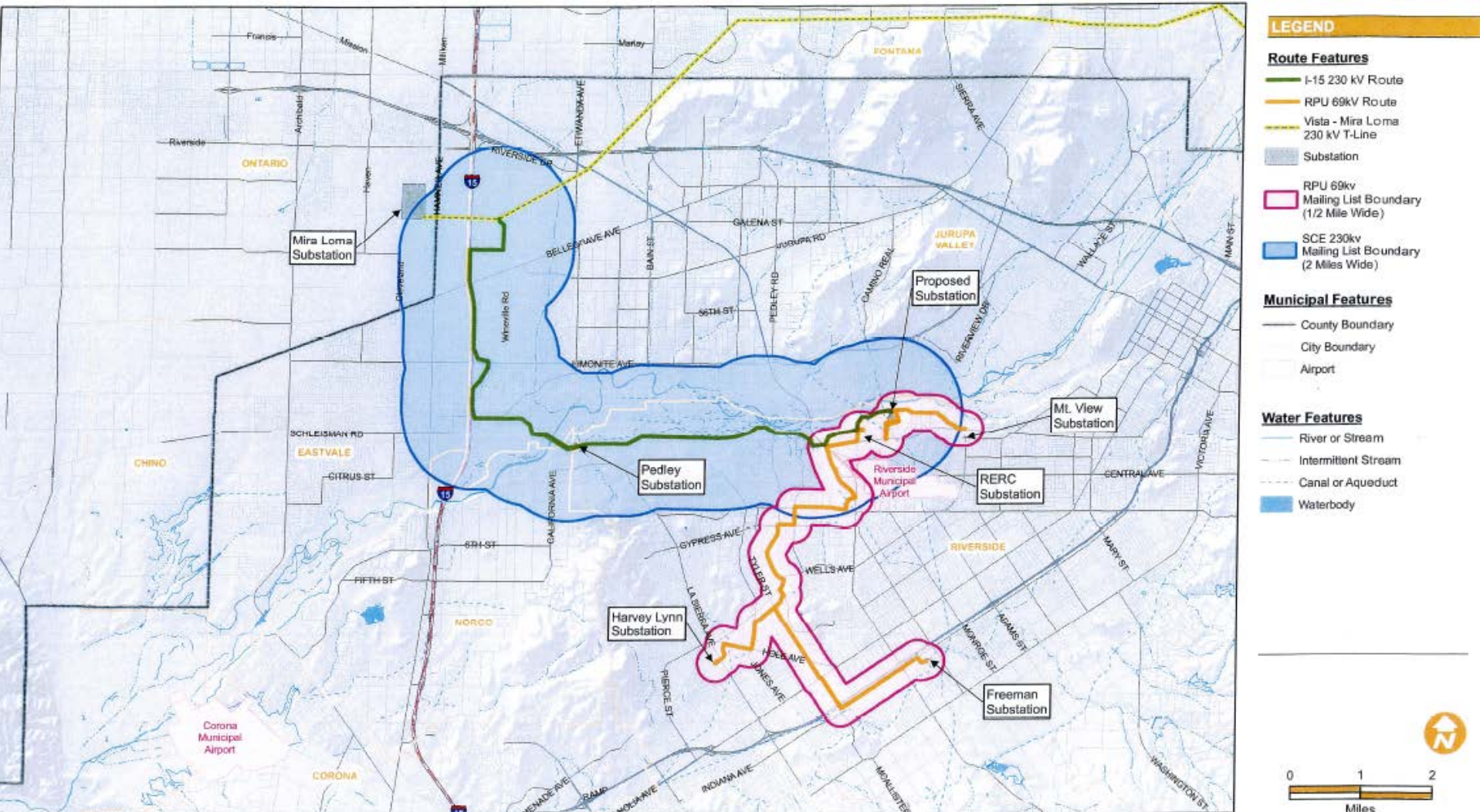
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- Construction of a transmission line in the corridor would present constructability and operational conflicts including building dams and levees which would impact river flow rates.
- If the line and structures were to collapse into the river during a flood event, a public safety hazard would be created.

Southern Connection

- Require New 500kV to 230kV Substation
 - Higher Environmental Impacts
 - Greater Project Footprint
 - 20 – 25 Miles of 230kV Transmission Lines
- SCE Valley Substation
 - 500kV to 115kV
 - Mira Loma/Vista 500kV to 230kV
 - Systems Cannot be Interconnected
 - Additional Equipment (3rd Substation) Required
 - Requires 4 Transmission Lines
 - Valley Substation to Riverside = 25 miles

Mailing List Boundary (also mailed to Interested Parties)

230 kV and 69 kV Mailing List Boundary



LEGEND

Route Features

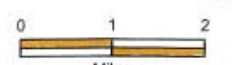
- I-15 230 kV Route
- RPU 69kV Route
- Vista - Mira Loma 230 kV T-Line
- Substation

Municipal Features

- RPU 69kv Mailing List Boundary (1/2 Mile Wide)
- SCE 230kv Mailing List Boundary (2 Miles Wide)
- County Boundary
- City Boundary
- Airport

Water Features

- River or Stream
- Intermittent Stream
- Canal or Aqueduct
- Waterbody



Public Outreach

- Newsletters mailed to project area
 - 7 newsletters (20,000 to 30,000 each)
- Open houses
 - 9 total, including 3 in the City of Jurupa Valley
- Presentations to interested parties
 - City and County Elected Officials
 - Jurupa Unified School District
 - Riverside County Airport Land Use Commission
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Public Outreach *(continued...)*

- Website: www.riversideca.gov/utilities/electric
- Project phone line: 951-710-5013
- Project email address: rtrp@riversideca.gov



- Shared information and documented public-concern
- Public-concern issues addressed in the EIR
- Technical Advisory Committee Meetings
 - 4 meetings with Riverside County airport, flood control, parks, etc.

Summary of Public Concerns

- Visual Impacts
- Health issues related to Electric and Magnetic Fields (EMF)
- Condemnation of property for right-of-way
- Negative impacts to property values
- “Eastern Route” is no longer considered a feasible alternative
- City “Lead Agency” for a project that is partially in the County
- Why not underground?
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EIR Schedule Summary

- **August through November 2011** - DEIR circulated for public review and comment
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- **April 2012** – City Planning Commission recommended adoption of a Final EIR in compliance with CEQA
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Recommendation

That the Board of Public Utilities receive and file this report.



Arts & Innovation

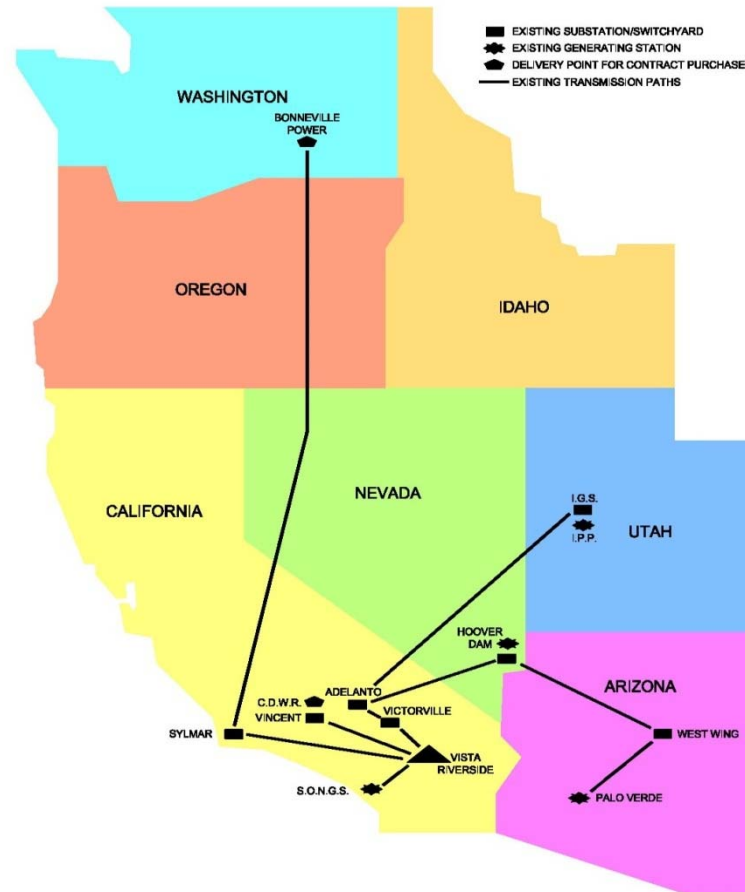
Riverside Transmission Reliability Project

Electric Committee

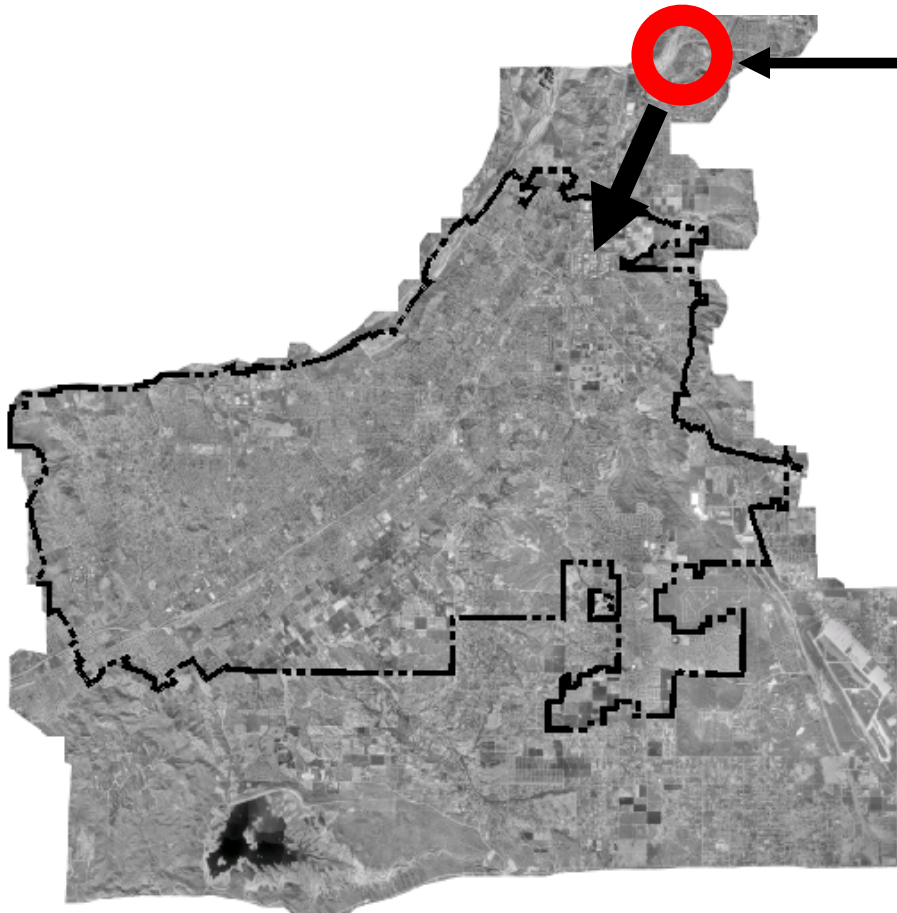
August 1, 2014

RiversidePublicUtilities.com

RPU Generation and Transmission Resources



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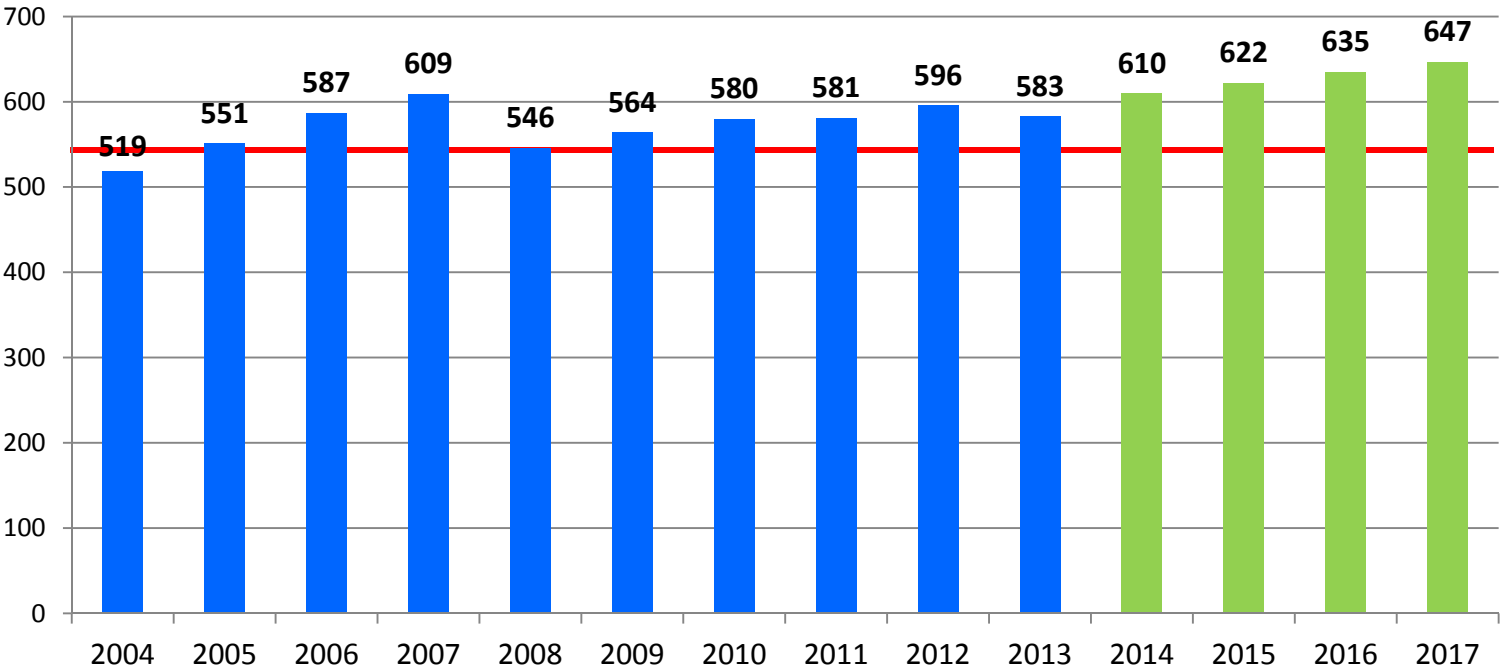


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RiversidePublicUtilities.com



RPU Historic and Projected Load in Megawatts



■ Historic Actual Load
■ Future Projected Load

— Vista Capacity Limit



Most Probable Vista Event?

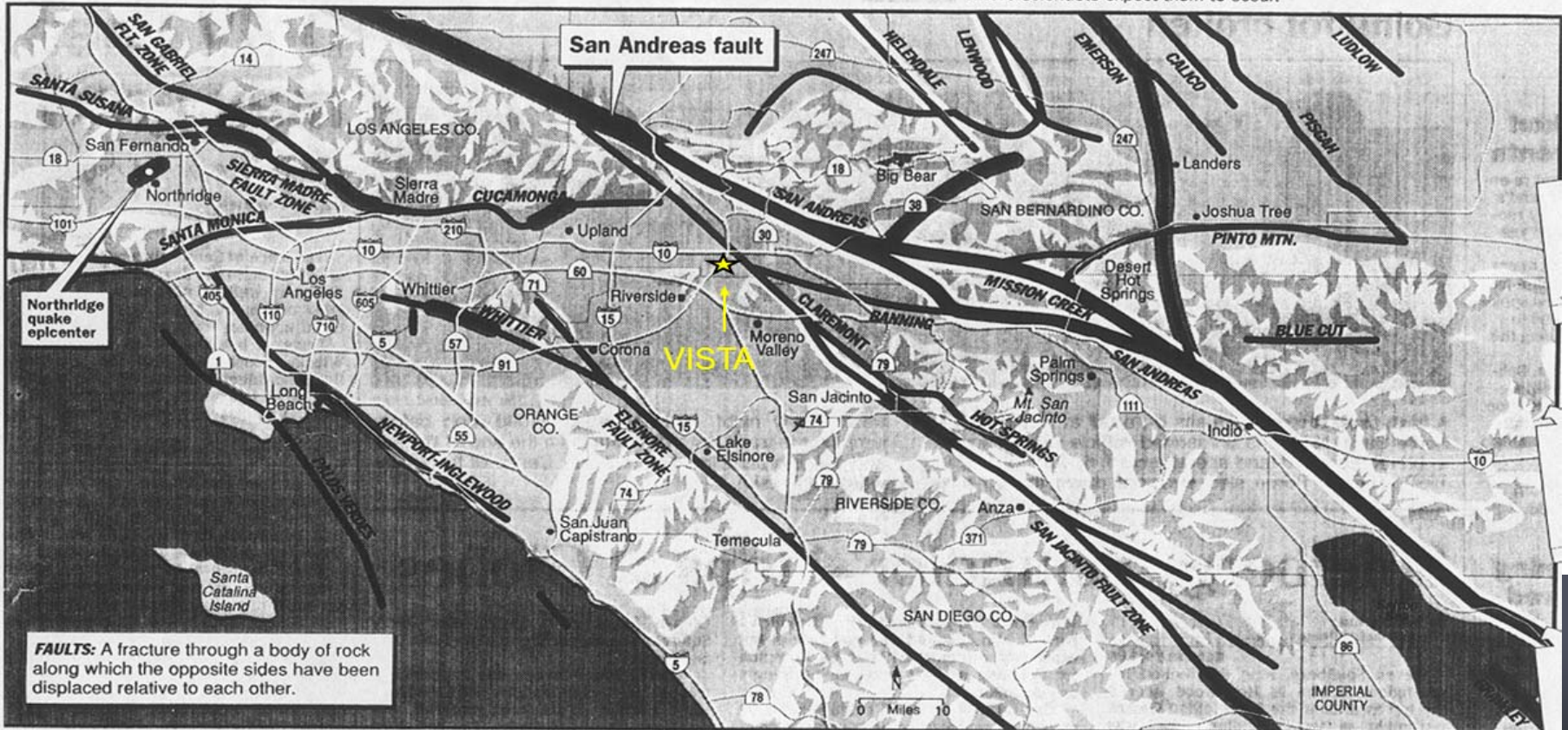
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FAULTS Where earthquakes over magnitude 5.5 have occurred in the past 5 years. Where scientists expect them to occur.



FAULTS: A fracture through a body of rock along which the opposite sides have been displaced relative to each other.

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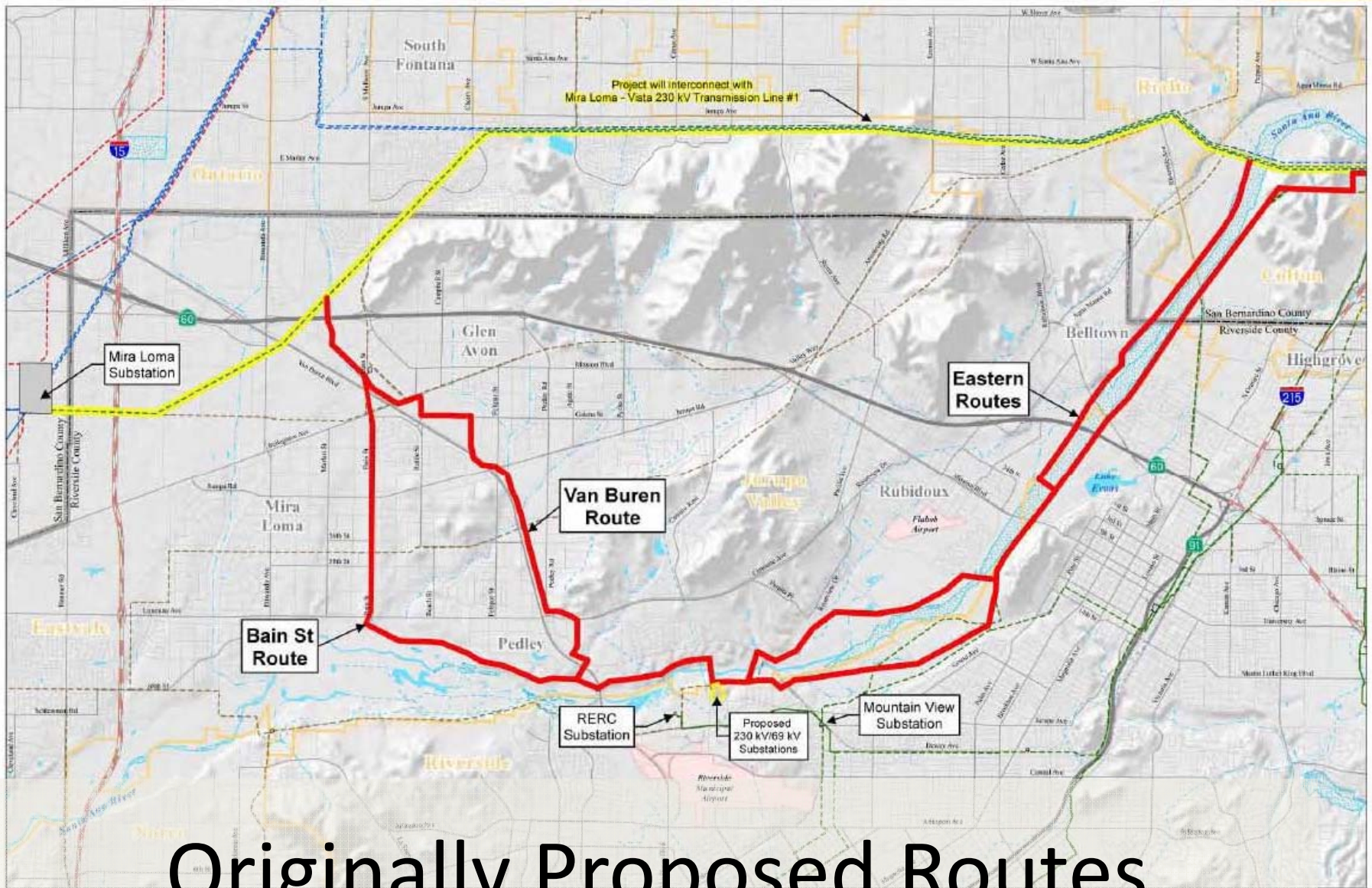
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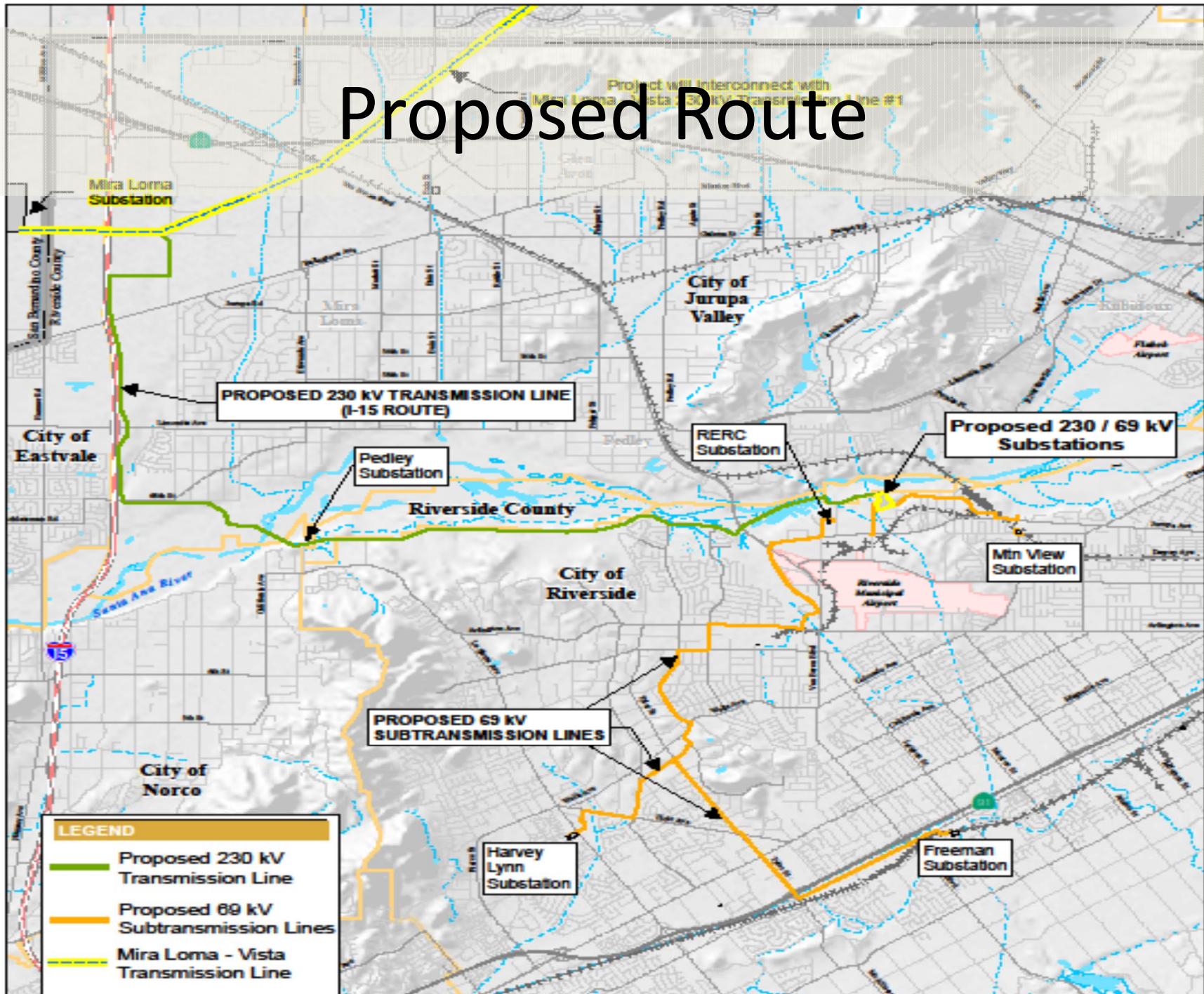


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RIVERSIDE TRANSMISSION RELIABILITY PROJECT

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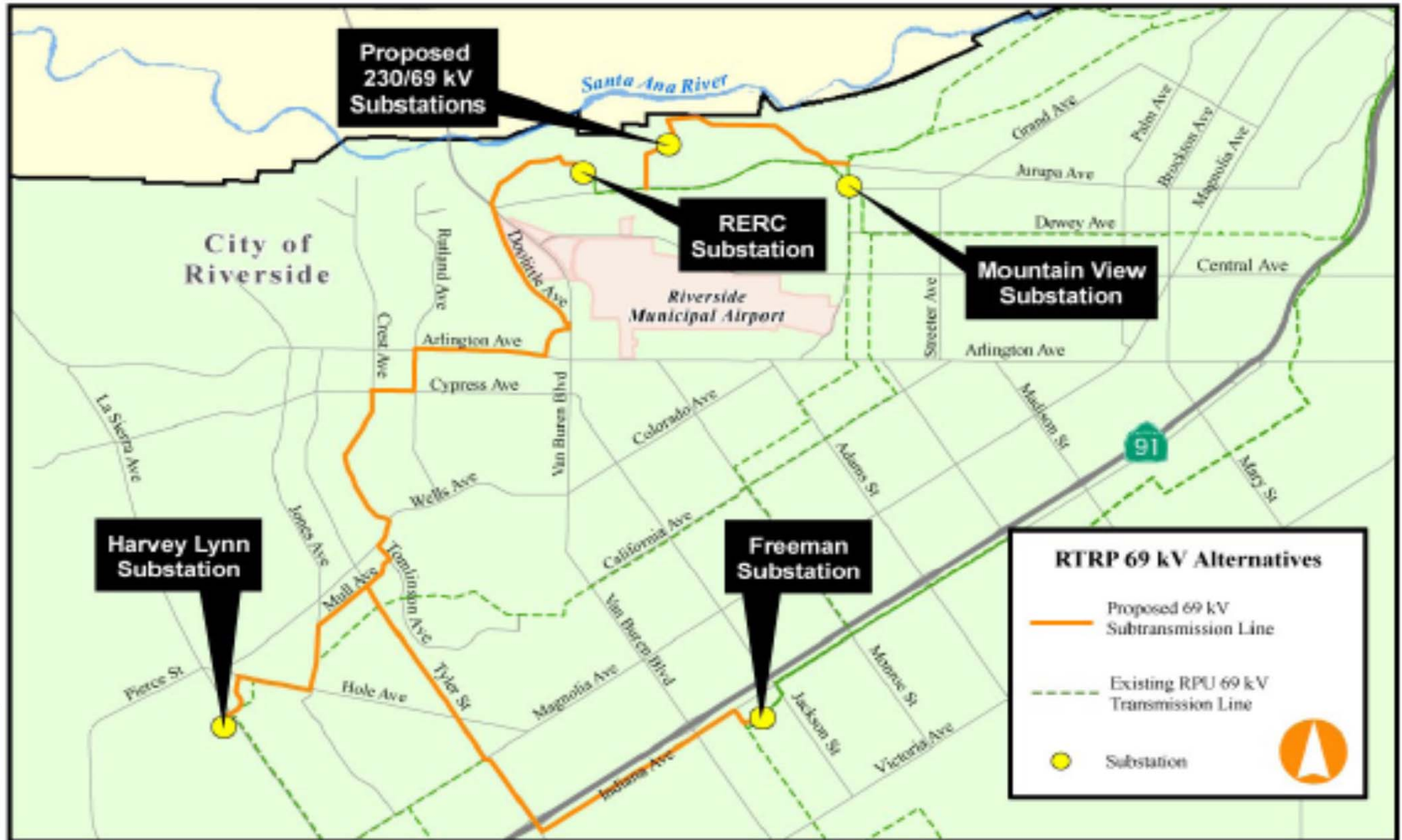
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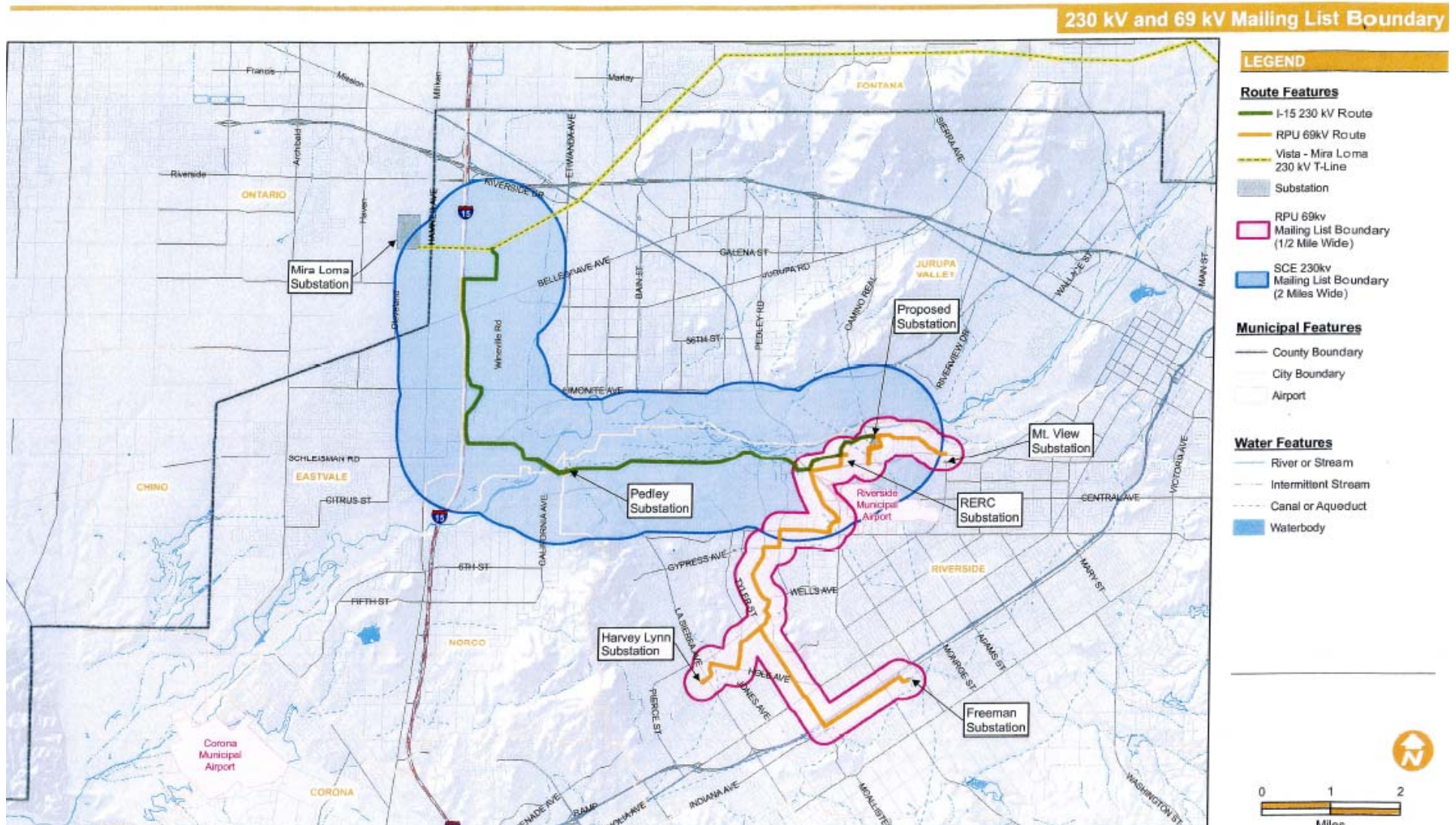
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CEQA Litigation

- City of Jurupa Valley filed petition challenging the EIR
 - Trial was held on April 11, 2014 at Los Angeles County Superior Court in Norwalk
 - Judge ruled in favor of the City of Riverside denying the City of Jurupa Valley's petition
 - On July 8, 2014 Jurupa Valley filed an appeal
- Schedule of litigation next steps
 - Jurupa valley's opening brief due early September
 - City of Riverside's brief due Oct-2014
 - Jurupa Valley's reply brief due early Nov-2014
 - Hearing date will be scheduled for early to mid 2015

City of Riverside

69kV Component Phase 1

- Litigation focused on 230kV component of RTRP, located mostly outside of the City of Riverside
- Portion of 69kV component is required improvement for transmission system to meet RPU's reliability criteria as the load growth within the city continues
- 69kV Phase 1 is RERC to Freeman Substation, and RERC to Harvey Lynn Substation segments - needed immediately to relieve transmission congestion around RERC

Project Activity

69kV Component Phase 1

- Notice of Appraisals were sent to 93 affected property owners along RERC-Harvey Lynn and RERC-Freeman segments
- Appraisals nearly complete (only 20 outstanding)
- Negotiations with land owners for ROW acquisition underway
 - First 15 offer packages ready
- Steel pole procurement package out for bid – long lead time item

Project Schedule

69kV Component Phase 1

- RERC-HL and RERC-Freeman lines (Phase 1):
 - Secure all easements (estimated complete by June 2015)
 - Issue construction contract (mid to late 2015)
 - 18 to 24 months for construction, depending on phasing
- Balance of 69kV work will be scheduled as SCE approval for 230kV portion becomes more clear

230kV Project Activity

- California State Parks, Office of Grants and Local Services
 - Land and Water Conservation Fund (LWCF) conversion application process
- Regional Conservation Authority (RCA)
 - Riverside Multi-Species Habitat Conservation Plan (MSHCP)
- SCE project coordination meetings
 - Once litigation is resolved, SCE will begin the application process to obtain approval of the Certificate of Public Convenience and Necessity (CPCN) through the CPUC
- SCE currently estimates construction to start in mid 2018 with an in service date of late 2020

Recommendation

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