

# WILDFIRE MITIGATION PLAN ANNUAL UPDATE

## Riverside Public Utilities - Energy Delivery

Board of Public Utilities  
June 14, 2021

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## Legal Requirements



1. Plan complies with the requirements of **Public Utilities Code Section 8387** for publicly owned electric utilities to prepare a wildfire mitigation plan by January 1, 2020.
2. Wildfire Mitigation Plan (WMP) designed to meet the standards of **SB 901**, which tasked all private and publicly owned utilities and electrical corporations to construct, maintain, and operate their electrical systems in a manner that minimizes the risk of wildfire, and to annually submit a wildfire mitigation plan.
3. **AB 1054** intended to compliment past bills, such as SB 901. AB 1054 adds an additional process requirement that the WMP be submitted to the Wildfire Safety Advisory Board.
4. **Updates on the WMPs will be due on July 1, 2021**

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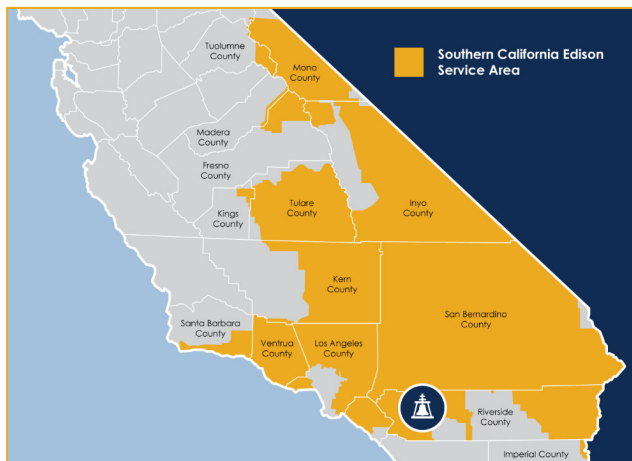


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## Understanding Our Risk

### SCE vs. Riverside Public Utilities

- **SCE** serves the high desert and mountainous areas
- **Riverside** is an urban city with wildfire risk on outskirts of the City



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## Understanding SCE's WMP & PSPS



- SCE's Wildfire Mitigation Plan (WMP) addresses how SCE reduces the risk of their electrical equipment igniting wildfires
  - Public Safety Power Shutoff (PSPS) is a mitigation measure for SCE's WMP
- SCE triggers PSPS events that impact RPU if required to de-energize



- RPU **does not have any control** over PSPS events
- RPU **WMP is specific** to RPU's service area

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## Effects of SCE PSPS



- RPU has a **single point of connection** to the statewide grid through SCE's Vista Substation
  - (7) direct 66kV lines serve the City of Riverside with ownership changes at arbitrary points
  - Demarcation of these lines create operational challenges (like customer communications and perceptions strains)
- RPU does not have enough internal generation to support system demand during all seasons, however, the Riverside Transmission Reliability Project (RTRP) will add a **second connection** to the statewide grid.

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## RPU Power Generation



**240 MW**  
**OF POWER**

Can be Provided by 2 Power Plants

- Primarily used to **offset peak demands** during the summer when system demand exceeds the capacity of single connection delivered from the statewide grid.
- Short-term fix rather than a long-term solution and cannot replace the reliability of a second connection to the statewide power grid.

RPU's average **off-peak** demand is 300 MW

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**POWERING  
OUR FUTURE**

RIVERSIDE TRANSMISSION  
RELIABILITY PROJECT

- The Riverside Transmission Reliability Project (RTRP) provides Riverside with a critical second connection to the California grid.
- Riverside needs additional power capacity to serve existing and projected electrical demand and avoid blackouts.

[RiversidePublicUtilities.com/RTRP](https://RiversidePublicUtilities.com/RTRP)



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## RPU Wildfire Mitigation Plan (WMP) Analysis



**Data Discovery:** Requested data, reports, existing procedures, and prior plans to be incorporated into the updated Wildfire Mitigation Plan



**Interview Personnel:** A series of interviews were held with personnel to determine what specific actions and plans they wanted included in the Wildfire Mitigation Plan



**Plan Development:** Developed a Wildfire Mitigation Plan based on the direction and information provided

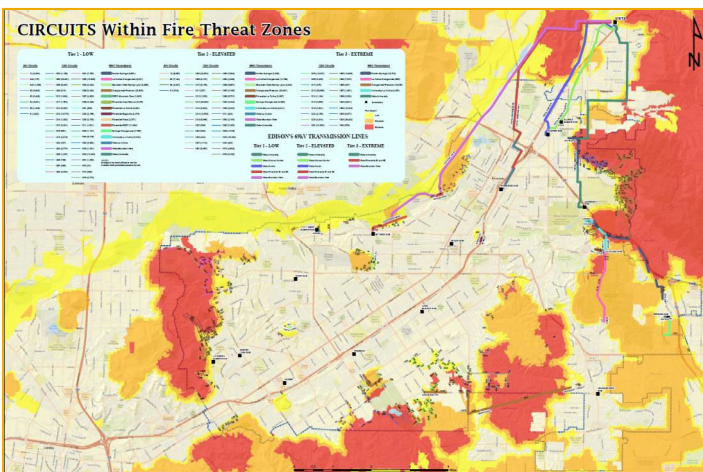


**Prior Actions:**

**December 17, 2019** - Approved by Riverside City Council

**May 6, 2020** - Submitted to Wildfire Safety Advisory Board

## Wildfire Mitigation Plan (WMP) Analysis



### Historical outage data

- Riverside Fire Dept. (RFD) Wildfire Threat Map + RPU Service Territory Map + RPU Asset Map

### Top 10 at-risk circuits:

- Traverse through tier 1 and tier 2 high fire threat (HFT) areas
- Length of circuit (per circuit) at risk

### Prioritized circuits for inspection

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## Preventative Wildfire Mitigation Efforts



**Brush clearance** under high voltage right-of-way



Due to recent increases of fires within the river bottom:

### – Collaboration with Riverside Fire Department

- Before, During & After all wildfire events
- Complete several river bottom inspections
- Complete extensive mitigation efforts in the area

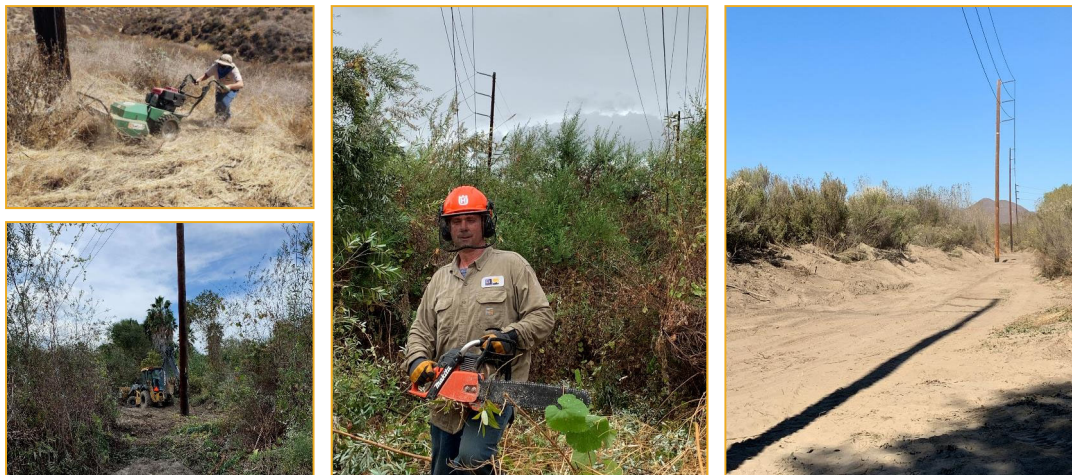
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## Preventative Wildfire Mitigation Efforts



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## Grid Management Enhancements

### Substation & Distribution Automation (DA) –

Over the last year, Energy Delivery has been updating older Substation Automation System (SAS) to migrate to a new SEL-Real Time Automation Controller (RTAC) infrastructure.

### SEL-Real Time Automation Controller –

- Designed with Distribution Automation (DA) in mind
- Easily share Intelligent Electronic Device (IED) data across networks
- Important for building a robust DA system
- Need to replace all Remote Terminal Units (RTUs) in our system with RTACs.
  - 12 RTUs replaced with RTACs, to date
  - 25 pending replacement



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## Grid Management Enhancements



### Weather Stations –

Three new weather stations installed at Harvey Lynn, Springs, and RERC Substations

This data is used to provide **real-time weather information** to the system operators. Soon we will be able to use data such as temperature, wind speed, and relative humidity to block reclosing on various feeders at our substations (a key risk mitigation strategy)

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## Grid Management Enhancements



### Load Relief and Fusing for Targeted Circuits:

- Evaluating and planning a fuse blowing scheme for both **Circuits 1285 and 1287**
- Load relief transfers from **Circuits 1284 to 1287**
- Completed the construction of approximately 30 locations for fuse blowing replacements on **Circuit 1364**



### Covered Conductor:

- Patrols have defined areas with bare or open wire. Grid Management plans to install covered conductor in targeted areas that traverse high fire threat terrain.
- Installation improves safety and reliability of the OH distribution network in areas that power outages are common due to falling vegetation, as well as high fire risk. Highly effective in areas where there's river crossings and extreme vegetation growth.
- Reduces the risk of wildfire and potential of wires down
- Can withstand damage and will not create sparks that cause wildfires

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## Real-Time Video

- **Cameras** provide Operators with **real-time video** of the greater Riverside area, paying special attention to **wildfire prone regions**
- Camera installed at **Box Springs Mountain Radio Site** and **City Hall**
- Electric Operations created a video network, so these video streams can be integrated with the LMR Dispatch consoles in the GCC



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## Customer Communications

A variety of communications channels will be utilized during a wildfire hazard event:



**Social Media**



**Traditional Media**



**Website**



**Phone Messages,  
Texts, Email**

RPU will begin general notification as early as **72 hours in advance** of the hazard event and communications will continue throughout an event.

Information will also be provided by the following avenues **throughout an event**:

- City & RPU Communications Team
- Public Information Officer
- 311 Call Center
- RPU Customer Service
- Customer Engagement



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## Summary



# RPU IS IN COMPLIANCE

### Things that we have accomplished:

- December 17, 2019 - RPU's Wildfire Mitigation Plan was adopted by the City of Riverside City Council
- May 6, 2020 - Approved/Adopted Plan was submitted to the Wildfire Safety Advisory Board (WSAB)
- July 1, 2021 - Updates on the POU WMPs are due to the WSAB



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## Next Steps

### The following recommendations are for next cycle of the WMP:



Prepare a **concise table** that summarizes which circuits, along with how many structures and conductor miles, are in the HFTD Tiers 2 and 3 of the CPUC Fire-Threat Map.



Consider **additional safety precautions** during Red Flag Warning



Consider **utilizing UAV high-precision imagery** for remote inspections



Consider **interval comparisons** for proactive repair



Develop **additional target metrics** to evaluate improvements



Develop **strategic initiatives** as data reveals trends



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## Recommendation

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That the Board of Public Utilities approve a recommendation to the City Council to approve the 2021 RPU Wildfire Mitigation Plan annual updates.