

Wildfire Mitigation Plan



Energy for What's Ahead®

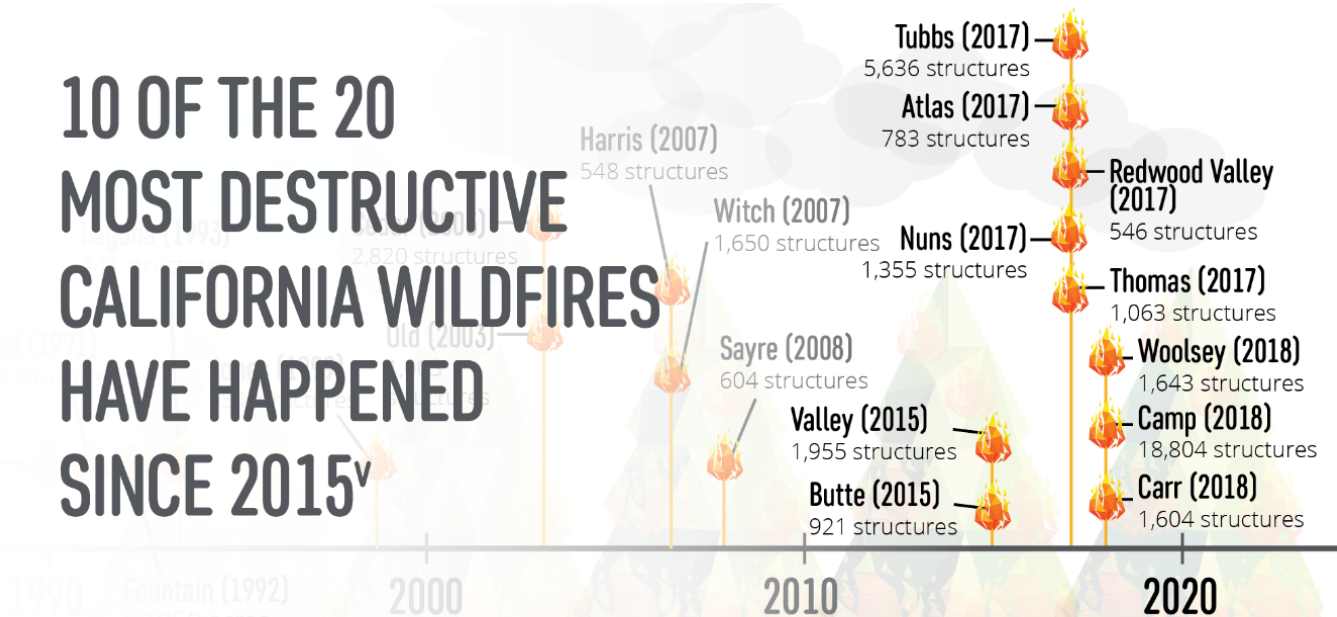


California's Wildfire Risk

Year-Round Fire Season: Changes to California's climate means that the traditional notion of a fire "season" no longer exists

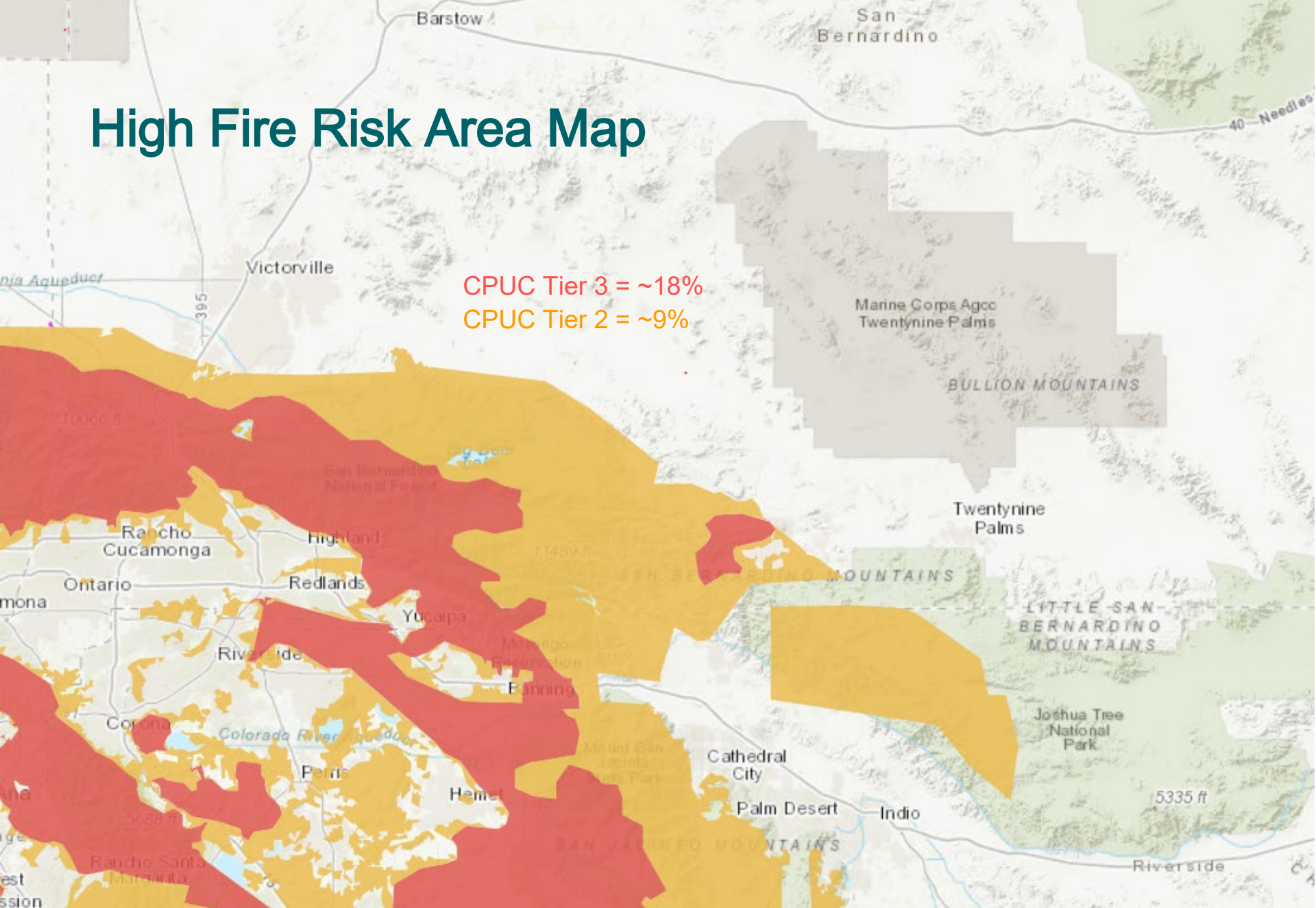
Hazardous fuel is building up: 10M acres of land contain ready -to-burn kindling from nearly 147M trees that have been killed or weakened by drought and bark beetle infestation

**10 OF THE 20
MOST DESTRUCTIVE
CALIFORNIA WILDFIRES
HAVE HAPPENED
SINCE 2015^v**



Source: [http:// www.fire.ca.gov /communications/downloads/ fact_sheets/Top20_Destruction.pdf](http://www.fire.ca.gov/communications/downloads/fact_sheets/Top20_Destruction.pdf)

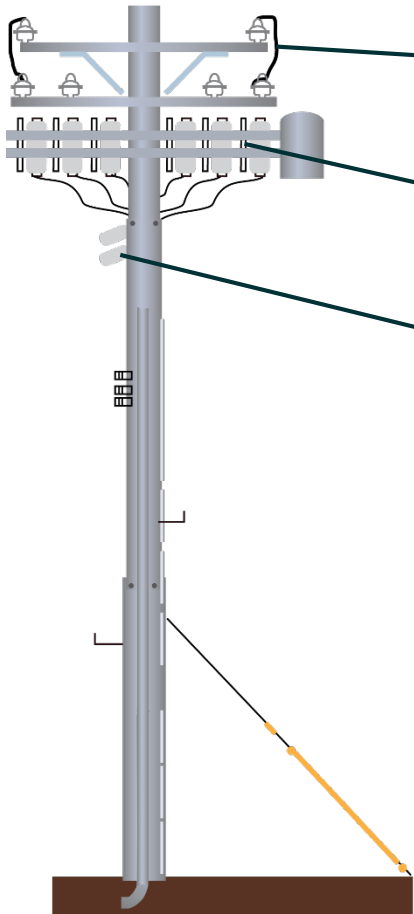
High Fire Risk Area Map



* Areas within SCE's service area that continue to be designated as HFRA and are in the process of being evaluated to determine whether they remain as HFRA

Infrastructure - System Hardening Elements

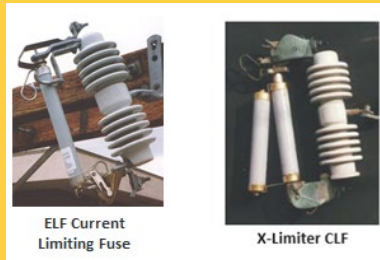
Hardened System



Covered Conductor



Fast-Acting, Current Limiting Fuses (CLF)



ELF Current Limiting Fuse

X-Limiter CLF

Reclosers



Enhanced Overhead Inspections (EOI)

High Fire Risk Areas

- Ground Inspections of **400,000+** distribution and transmission structures
- Aerial Inspections by helicopters and drones with Infrared, Ultraviolet, LiDAR and HD image scanning

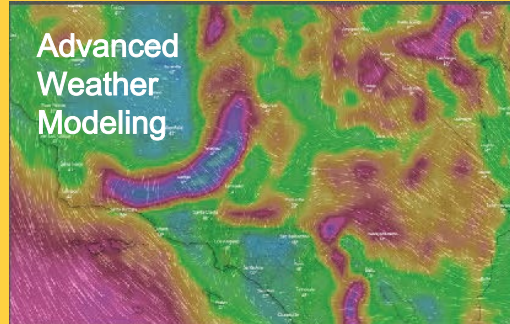


SCE's helicopters are equipped with software and high-tech cameras, like the one shown above, to find potential risk undetectable to the human eye

Situational Awareness Capabilities



- Hi-Res Data
- Local Weather



- Better Forecasting
- Advanced Warning



- High-Definition
- Remote-controlled

Situational Awareness Center

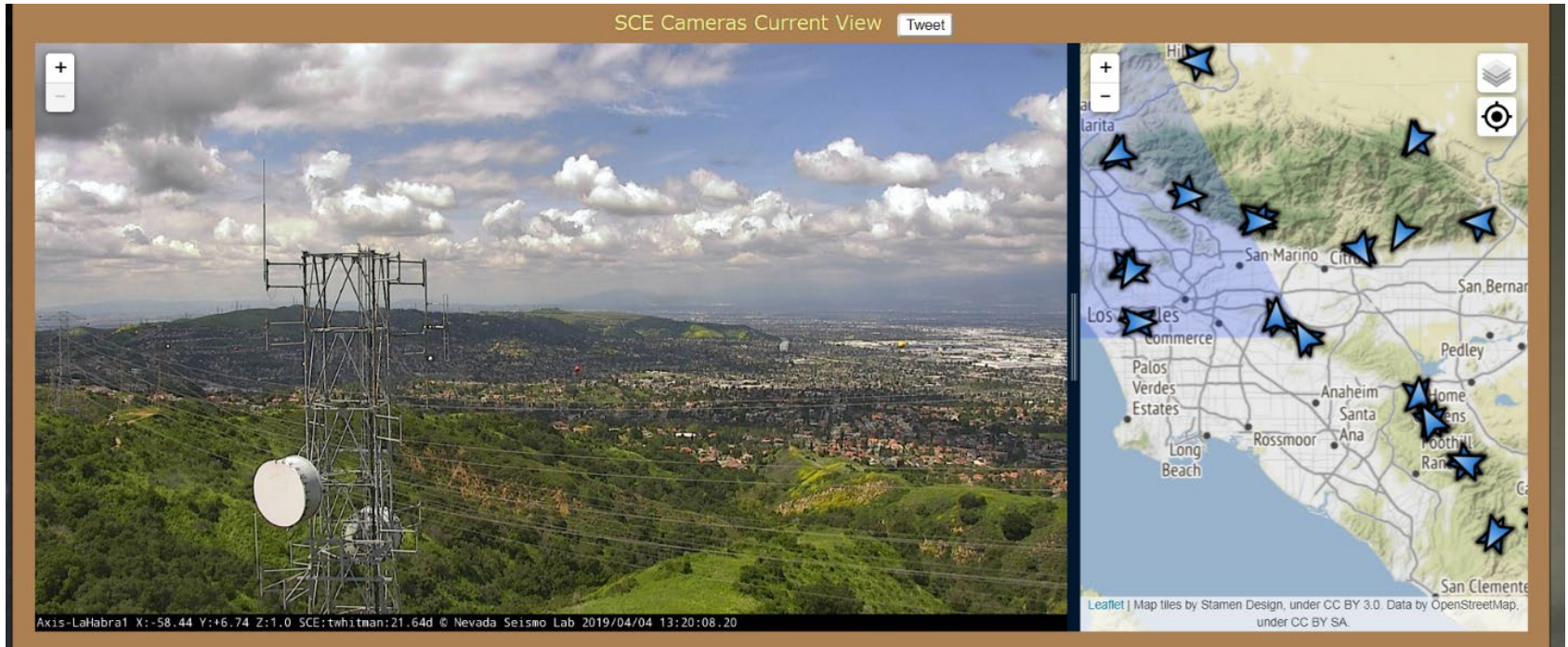
- SCE meteorologists
- 24/7 monitoring



Wildfire HD Camera

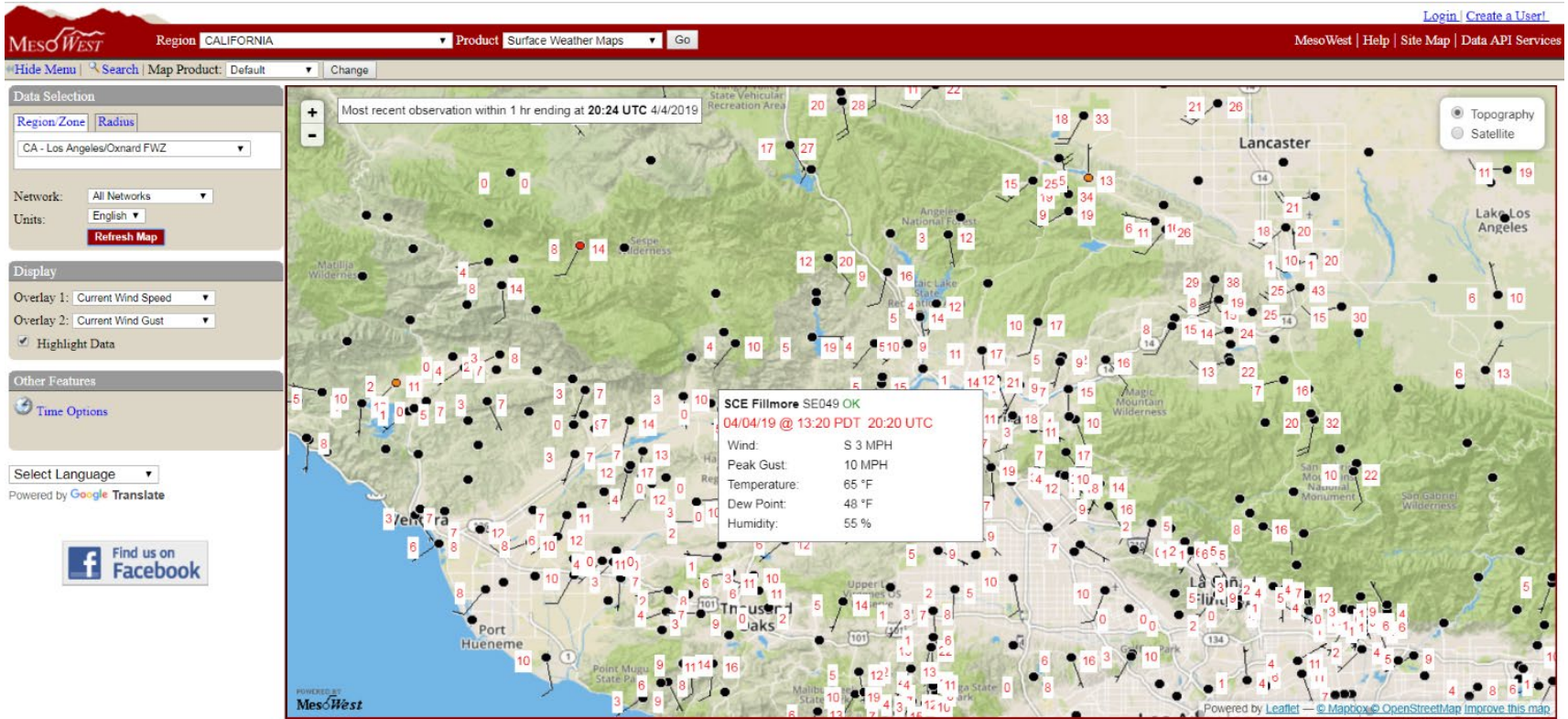


Wildfire HD Camera



www.alertwildfire.org

Weather Stations



mesowest.utah.edu

Vegetation Management



- 20+ in-house certified arborists
- 800+ pruning contractors with 60 more crews added June/July 2018
- ≈ 900,000 trees inspected annually
- ≈ 700,000 pruned per year; 400,000 trees in high fire risk areas

2019

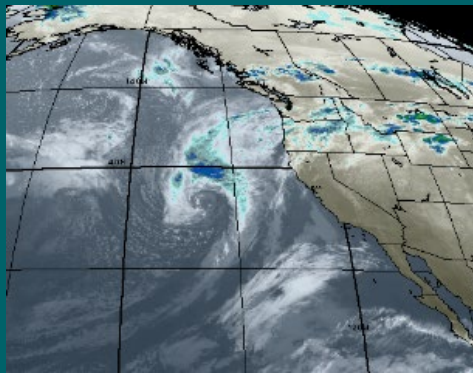
- Continue to remove dead, dying, diseased trees
- Remove additional **7,500** which pose a fall-in or blow-in risk to SCE electrical facilities
- 12-ft tree clearance from distribution power lines in high fire areas

Public Safety Power Shutoff (PSPS)

- De-energization to prevent ignitions from powerlines
- Used during **extreme fire conditions**
- Primarily impacts circuits in high fire risk areas

Decision Points

Fire Scientists, Meteorologists, Field Observation & Emergency Managers:



- Strong Wind & Dry Fuel



- Real-time observations

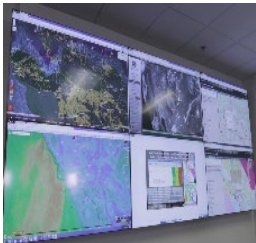


- Impact of de-energizing circuits

* Sudden onset of conditions may prevent the input from real-time observations or consultation with first responders

PSPS Ideal Timeline

4-7 DAYS
AHEAD



Forecast
Weather &
Fire
Conditions

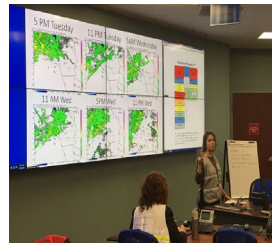
3 DAYS
AHEAD



SCE Incident
Management
Team activated

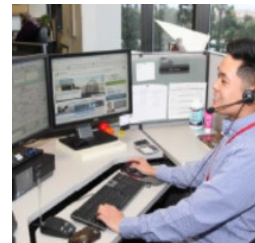
County
Operational
Areas informed
of potential
activation

2 DAYS
AHEAD



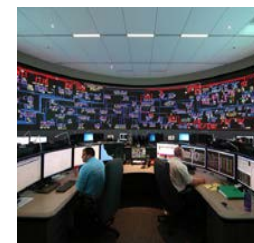
1st Notification
PSPS Possible
sent to agencies
and customers

1 DAY
AHEAD



2nd
Notification
PSPS
Possible

POWER
SHUTOFF



3rd
Notification
Power
Shutoff

POWER
RESTORATION



4th
Notification
Power
Restored
After
Inspection

PLANNING AND MONITORING

OUTAGE

*Erratic or sudden onset of conditions may impact our ability to provide advanced notice to customers.

Causes of Power Outages

Power Outages Can Occur for Many Reasons

- Maintenance
- Emergency Repairs
- Requests from Fire Agencies
- Natural Disasters

Have a Plan and Be Prepared

- Be Informed
- Plan Ahead
- Take Action



Useful Information

- Update Customer Contact Information <https://www.sce.com/outagealerts>
- Information on SCE Wildfire Mitigation Plan www.sce.com/wildfire
- Twitter - [@sce](https://twitter.com/sce)
- Facebook – www.facebook.com/sce
- Fire Cameras- www.alertwildfire.org
- Weather Stations – mesowest.utah.edu
- CPUC Wildfire Maps Information - www.cpuc.ca.gov/wildfiresinfo/
- Fire Preparedness - calfire.ca.gov/fire_protection/fire_protection_be_prepared
- Red Cross Emergency Preparedness
www.redcross.org/get-help/how-to-prepare-for-emergencies.html
- FEMA Emergency Preparedness –



Thank you!

www.sce.com/wildfire

We all have a role in resiliency and preparedness

“Preparedness is everyone's job. Not just government agencies but all sectors of society -- service providers, businesses, civic and volunteer groups, industry associations and neighborhood associations, as well as every individual citizen -- should plan ahead for disaster. During the first few hours or days following a disaster, essential services may not be available. People must be ready to act on their own.”

-California Offices of Emergency Services