

# SCE Emergency Operations Center

Helping keep our communities safe



# FORWARD LOOKING STATEMENTS

Statements contained in this presentation about future performance, including, without limitation, operating results, capital expenditures, rate base growth, dividend policy, financial outlook, and other statements that are not purely historical, are forward-looking statements. These forward-looking statements reflect our current expectations; however, such statements involve risks and uncertainties. Actual results could differ materially from current expectations. These forward-looking statements represent our expectations only as of the date of this presentation, and Edison International assumes no duty to update them to reflect new information, events or circumstances. Important factors that could cause different results include, but are not limited to the:

- ability of SCE to recover its costs through regulated rates, including uninsured wildfire-related and debris flow-related costs, costs incurred to mitigate the risk of utility equipment causing future wildfires, costs incurred as a result of the COVID-19 pandemic, and increased labor and materials costs due to supply chain constraints and inflation;
- ability of SCE to implement its Wildfire Mitigation Plan and capital program;
- risks of regulatory or legislative restrictions that would limit SCE's ability to implement Public Safety Power Shutoff ("PSPS") when conditions warrant or would otherwise limit SCE's operational PSPS practices;
- risks associated with implementing PSPS, including regulatory fines and penalties, claims for damages and reputational harm;
- ability of SCE to maintain a valid safety certification;
- ability to obtain sufficient insurance at a reasonable cost, including insurance relating to wildfire-related claims, and to recover the costs of such insurance or, in the event liabilities exceed insured amounts, the ability to recover uninsured losses from customers or other parties;
- extreme weather-related incidents (including events caused, or exacerbated, by climate change, such as wildfires, debris flows, droughts, high wind events and extreme heat events) and other natural disasters (such as earthquakes), which could cause, among other things, public safety issues, property damage, operational issues (such as rotating outages and issues due to damaged infrastructure), PSPS activations and unanticipated costs;
- risk that California Assembly Bill 1054 ("AB 1054") does not effectively mitigate the significant exposure faced by California investor-owned utilities related to liability for damages arising from catastrophic wildfires where utility facilities are alleged to be a substantial cause, including the longevity of the Wildfire Insurance Fund and the CPUC's interpretation of and actions under AB 1054, including its interpretation of the prudence standard established under AB 1054;
- ability of Edison International and SCE to effectively attract, manage, develop and retain a skilled workforce, including its contract workers;
- decisions and other actions by the California Public Utilities Commission, the Federal Energy Regulatory Commission, the Nuclear Regulatory Commission and other governmental authorities, including decisions and actions related to nationwide or statewide crisis, determinations of authorized rates of return or return on equity, the recoverability of wildfire-related and debris flow-related costs, issuance of SCE's wildfire safety certification, wildfire mitigation efforts, approval and implementation of electrification programs, and delays in executive, regulatory and legislative actions;
- cost and availability of labor, equipment and materials, including as a result of supply chain constraints;
- ability of Edison International or SCE to borrow funds and access bank and capital markets on reasonable terms;
- risks associated with the decommissioning of San Onofre, including those related to worker and public safety, public opposition, permitting, governmental approvals, on-site storage of spent nuclear fuel and other radioactive material, delays, contractual disputes, and cost overruns;
- pandemics, such as COVID-19, and other events that cause regional, statewide, national or global disruption, which could impact, among other things, Edison International's and SCE's business, operations, cash flows, liquidity and/or financial results and cause Edison International and SCE to incur unanticipated costs;
- physical security of Edison International's and SCE's critical assets and personnel and the cybersecurity of Edison International's and SCE's critical information technology systems for grid control, and business, employee and customer data;
- risks associated with cost allocation resulting in higher rates for utility bundled service customers because of possible customer bypass or departure for other electricity providers such as Community Choice Aggregators ("CCA," which are cities, counties, and certain other public agencies with the authority to generate and/or purchase electricity for their local residents and businesses) and Electric Service Providers (entities that offer electric power and ancillary services to retail customers, other than electrical corporations (like SCE) and CCAs);
- risks inherent in SCE's capital investment program, including those related to project site identification, public opposition, environmental mitigation, construction, permitting, changes in the California Independent System Operator's transmission plans, and governmental approvals; and
- risks associated with the operation of electrical facilities, including worker and public safety issues, the risk of utility assets causing or contributing to wildfires, failure, availability, efficiency, and output of equipment and facilities, and availability and cost of spare parts.

Other important factors are discussed under the headings "Forward-Looking Statements", "Risk Factors" and "Management's Discussion and Analysis" in Edison International's Form 10-K and other reports filed with the Securities and Exchange Commission, which are available on our website: [www.edisoninvestor.com](http://www.edisoninvestor.com). These filings also provide additional information on historical and other factual data contained in this presentation.

# SCE SERVICE AREA & HIGH FIRE RISK AREAS



**50,000 SQ. MI.**

of SCE service area across southern, central and coastal California



**14,000 SQ. MI.**

of high fire risk areas



**52,000 MI.**

of SCE overhead distribution and transmission lines



**14,000 MI.**

in high fire risk areas

**Counties with high fire risk area served by SCE**

Fresno  
Inyo  
Kern  
Los Angeles  
Mono  
Orange  
Riverside  
San Bernardino  
Santa Barbara  
Tulare  
Ventura

**Counties with no or limited high fire risk areas served by SCE**

Imperial  
Kings  
Madera  
Tuolumne

**5M**

customer accounts or 15M residents in SCE's service area

**1.3M**

customer accounts or 3.9M residents served by circuits in high fire risk areas

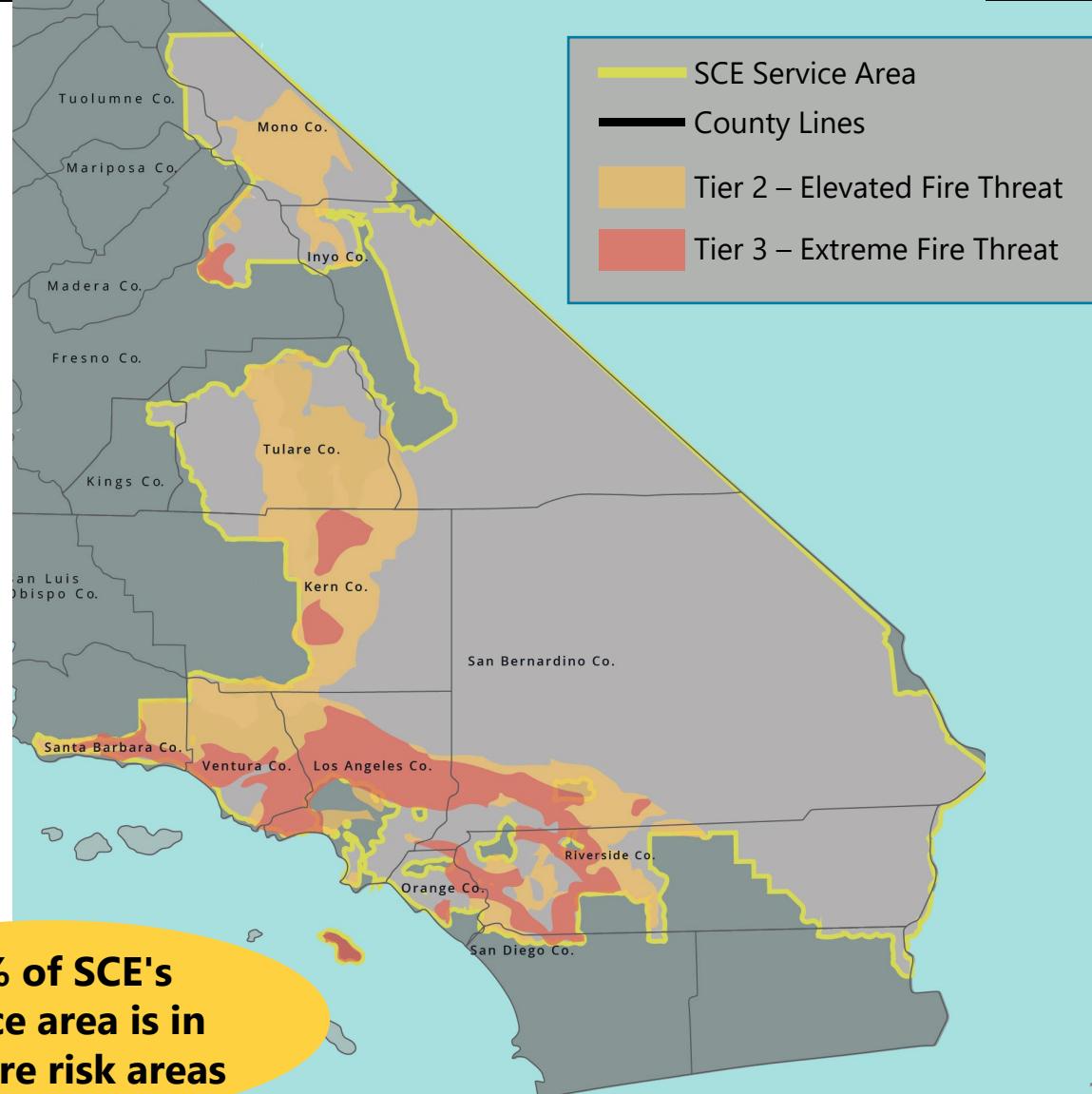
**1.4M**

power poles

**300,000**

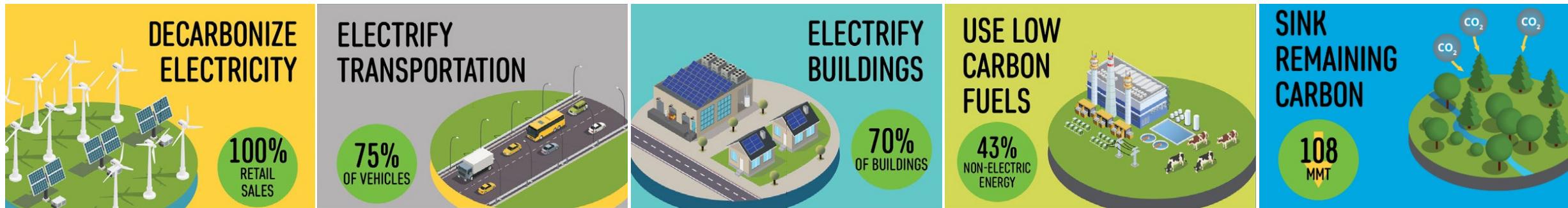
in high fire risk areas

**27% of SCE's service area is in high fire risk areas**



# REACHING CALIFORNIA'S 2045 GHG GOALS REQUIRES A NEAR-COMPLETE TRANSFORMATION OF ENERGY USE ECONOMY WIDE

## Pathway 2045: Key steps California must take to reach carbon neutrality



# SCE'S LONG-TERM GROWTH DRIVERS ARE HIGHLY ALIGNED WITH CALIFORNIA'S PUBLIC POLICY GOALS

**Safe, Reliable, and Affordable  
Electricity Service**

**&**

**Decarbonization of California**



**Infrastructure  
Replacement**



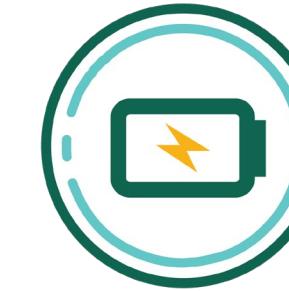
**Wildfire  
Mitigation**



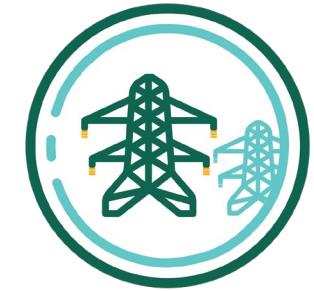
**Grid  
Modernization**



**Electrification**



**Energy  
Storage**

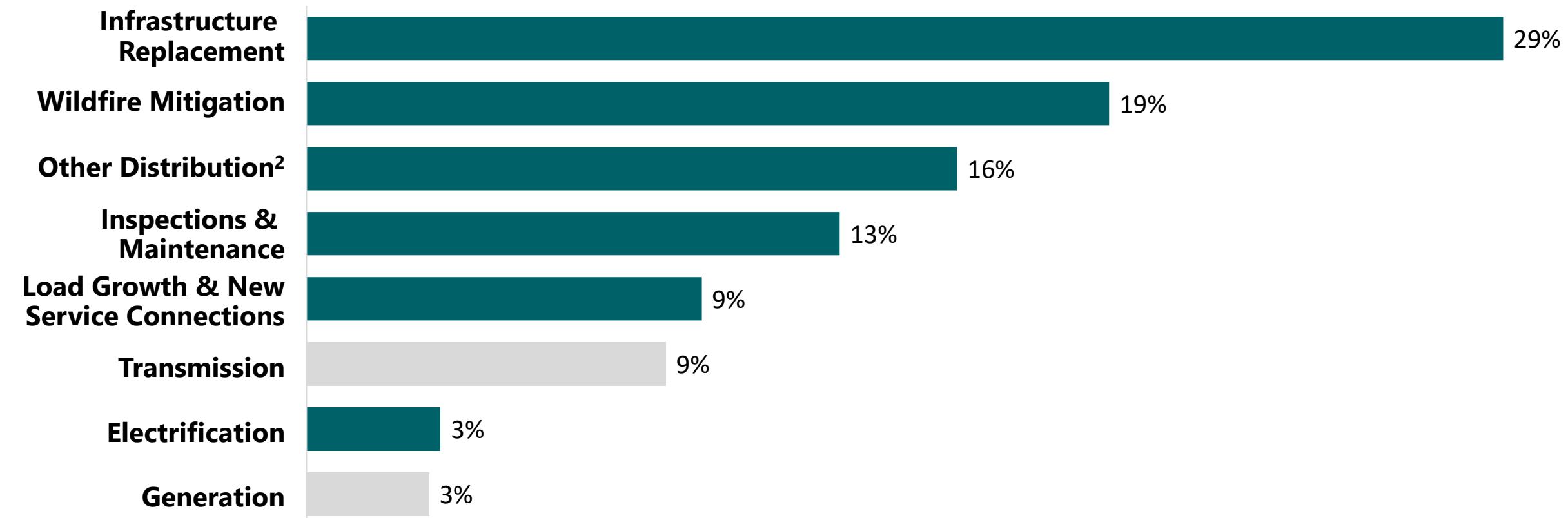


**Transmission**

# OVER 80% OF SCE'S CAPITAL INVESTMENTS ARE IN ITS DISTRIBUTION GRID, CONSISTENT WITH WIRES-FOCUSED STRATEGY

SCE forecasts investing \$27–30 billion from 2021 to 2025 to support SCE's wildfire mitigation strategy and clean energy transformation in California

Percentage of 2021–2025 capital plan<sup>1</sup>



1. Subject to change depending on 2025 GRC testimony

2. Includes utility-owned storage and other

# SCE'S INFRASTRUCTURE REPLACEMENT PROGRAM

## Categories of Infrastructure Replacement Work

### **Overhead Infrastructure**

Replacement of overhead powerlines and equipment

### **Underground Infrastructure**

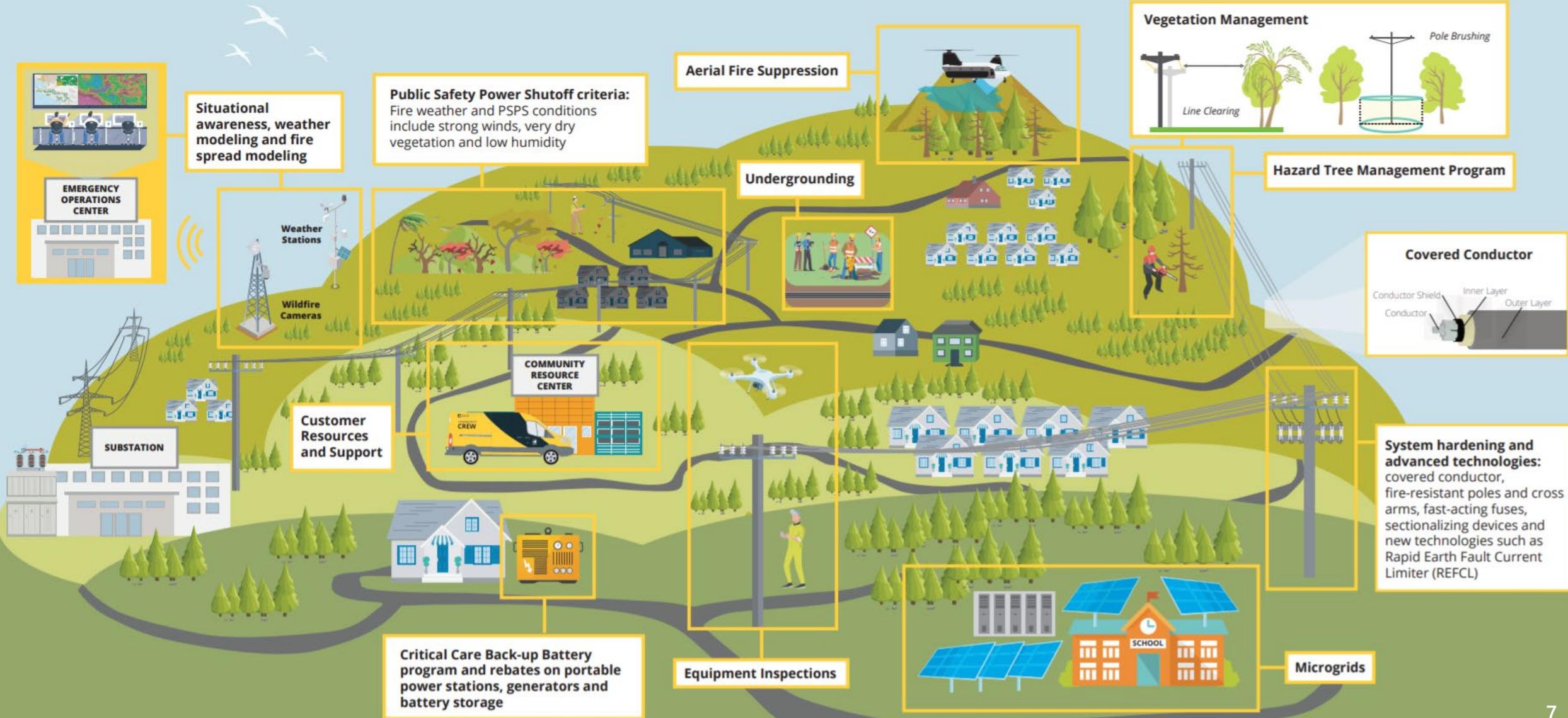
Replacement of underground switches, vaults, and cable

### **Infrastructure in Overhead & Underground Configurations**

Replacement of capacitor banks, automatic reclosers, upgrading 4kV to 16kV systems to manage future load growth



# SCE'S WMP IS A COMPREHENSIVE STRATEGY REDUCING WILDFIRE RISK IN OUR COMMUNITIES



# COVERED CONDUCTOR IS ONE OF THE MOST EFFECTIVE MEASURES TO REDUCE WILDFIRE & PSPS RISKS IN SCE'S SERVICE AREA

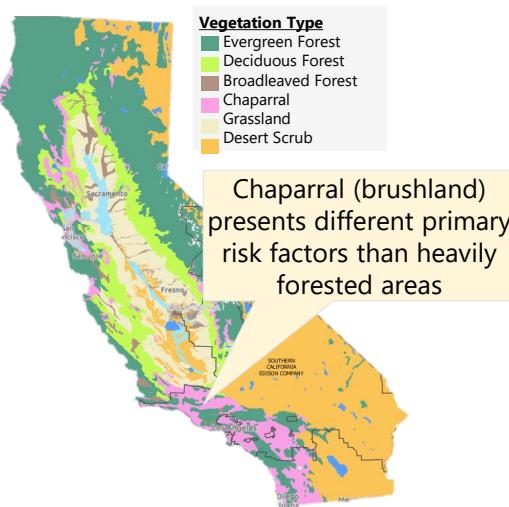
**Covered conductor is a very valuable tool to expeditiously and cost-effectively reduce wildfire risk specific to SCE**

**Undergrounding considered for certain locations based on risk profile**

## Geography

Contact from vegetation and other objects is a key risk factor in much of SCE's area

Covered conductor is very effective in mitigating these risks

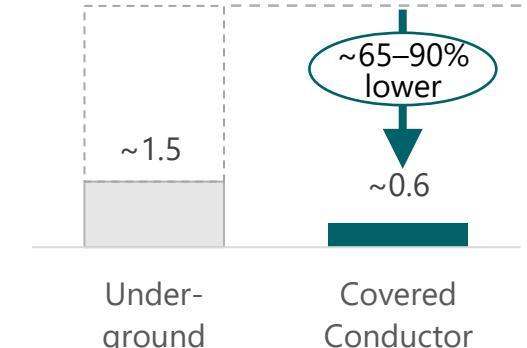


## Cost to Implement

Covered conductor installation costs significantly lower than undergrounding

Undergrounding costs vary depending on construction methods, locational, and operational factors

Cost per mile<sup>1</sup>  
\$ in Millions  
~5.5

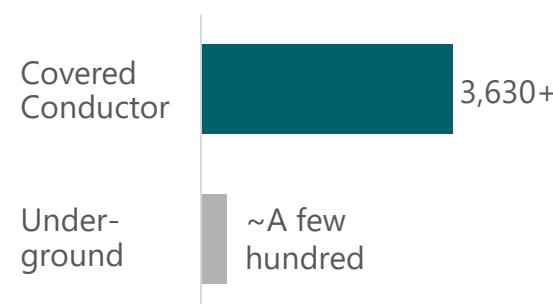


## Execution Speed

Covered conductor can be deployed within 16–24+ months, and sometimes faster

Undergrounding generally takes 25–36+ months

Actual installed miles of covered conductor<sup>2</sup> vs. hypothetical underground miles<sup>3</sup>



## Unique Factors

Undergrounding is considered where there is:

- High burn frequency
- Limited egress
- Wind speeds exceeding covered conductor PSPS thresholds
- Exceptionally high potential consequence (>10,000 acres)

*Several hundred miles currently under consideration for additional enhanced mitigation, including undergrounding*

1. Based on data provided in SCE's 2022 WMP Update

2. Through June 30, 2022

3. Underground miles is a hypothetical approximation of underground lines that could have been constructed through December 31, 2021, based on SCE's assumptions and experience with planning and executing undergrounding projects

# EXECUTING PSPS EFFECTIVELY: THRESHOLDS FOR ACTIVATION AND DE-ENERGIZATION

## FIRE POTENTIAL INDEX (FPI)

Formula estimates the potential of fire ignition and spread:  
Normal: 1-11  
Elevated: 12-14  
Extreme: 15+

## WINDSPEED THRESHOLD FOR ACTIVATION

Wind speeds at which our system is vulnerable to flying debris or that pose a risk to our infrastructure

## DE-ENERGIZATION THRESHOLD

## ACTIVATION THRESHOLDS FOR MOST CIRCUITS

Currently set at 13 in most areas contingent on fire resource availability

### Bare wire circuits:

99<sup>th</sup> percentile historic windspeed for a given circuit **or** NWS Wind Advisory of sustained windspeeds of 31 mph or gusts of 46 mph

### Fully covered conductor circuits:

NWS High Wind Warning of sustained windspeeds of 40 mph or gusts of 58 mph

Wind speeds determined separately for each circuit based on specific risks of the event

Technical paper and fact sheet available at  
[sce.com/pspsdecisionmaking](http://sce.com/pspsdecisionmaking)

# EXPEDITED GRID HARDENING

## ON CIRCUITS IMPACTED BY PSPS



### Completed in 2021 on 72 circuits

- Expedited installation of:
  - **700** miles of covered conductor<sup>1</sup>
  - **23** sectionalizing devices
- Removed **81,000** customers from PSPS consideration through circuit exceptions and switching protocols
- **45%** reduction in PSPS duration overall, and **73%** reduction in PSPS duration on the 72 targeted circuits

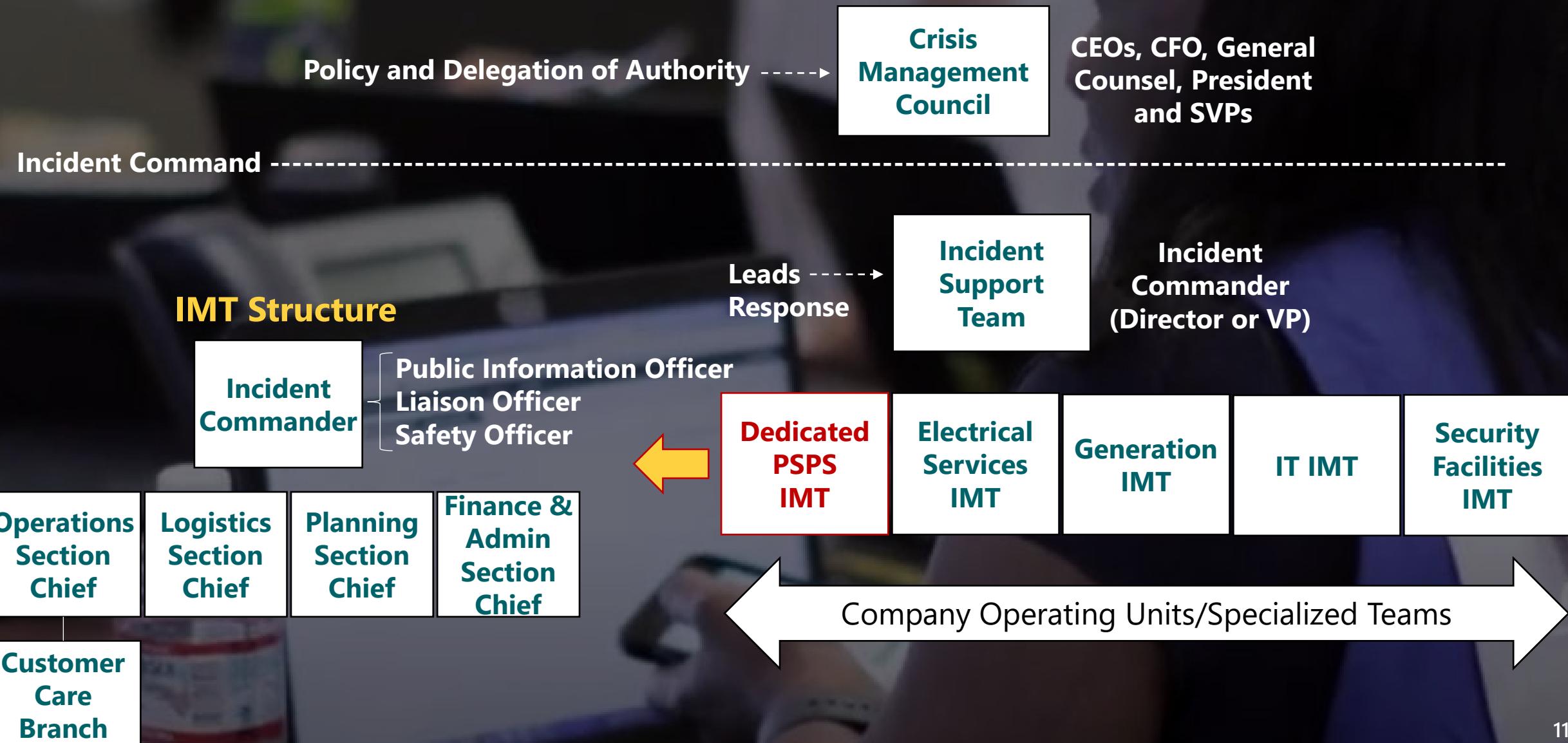
### Plans for 2022 on 50+ circuits

- Expedite installation of:
  - **150+** miles of covered conductor; 114 miles completed through June
  - **3** miles of undergrounding; 0 miles
  - **8** sectionalizing devices; 2 devices
- Removing an additional **8,165** customers from PSPS consideration through circuit exceptions and switching protocols<sup>2</sup>
- Targeting **17%** reduction in PSPS duration overall, and **60%** reduction on the 50+ targeted circuits

1. Replaced 1,500 miles of covered conductor on all circuits in SCE's high fire risk areas in 2021

2. Reviewing 24,000 additional customers

# EMERGENCY RESPONSE TEAM STRUCTURE



# CONCURRENT EMERGENCY RESPONSE SYSTEM

## Operations Capabilities

State-of-the-art EOC includes designated spaces for alternate communications, operations team, press conferences and other key functions

Deployable mobile command center outfitted with full range of telecommunications capabilities

Virtual operations, tested and used in 2020 and 2021; communications through Microsoft Teams, key PSPS IMT members outfitted with enhanced home equipment

Key operations centers and personnel outfitted with radios and satellite phones

## Year-Round Business Resiliency Staffing

24/7 Watch Office - 24/7 Duty Manager

Fire science - Meteorology

Emergency operations logistics and coordination

Deployment of fire management staff to Incident Command posts during active wildfires

Compliance (CPUC, NERC, FERC)

Training and exercises

# HELPFUL INFORMATION & RESOURCES

## **SCE Wildfire Webpage – [sce.com/wildfire](http://sce.com/wildfire)**

### **SCE Notifications**

- Sign up for PSPS alerts – [sce.com/pspsalerts](http://sce.com/pspsalerts)
- Sign up for the Energized by Edison Wildfire Mitigation Newsletter – [energized.edison.com/newsletter](http://energized.edison.com/newsletter)

### **Situational Awareness**

- SCE outage map – [sce.com/outagemap](http://sce.com/outagemap)
- PSPS information – [sce.com/psp](http://sce.com/psp)
- PSPS decision making – [sce.com/pspdecisionmaking](http://sce.com/pspdecisionmaking)
- Role of weather in PSPS – [sce.com/fireweather](http://sce.com/fireweather)
- CPUC wildfire maps – [ia.cpuc.ca.gov/firemap/](http://ia.cpuc.ca.gov/firemap/)
- Wildfire cameras – [alertwildfire.org](http://alertwildfire.org)
- Weather stations – [sce.com/weatherstations](http://sce.com/weatherstations)

### **Preparedness**

- SCE emergency preparedness – [sce.com/beprepared](http://sce.com/beprepared)
- CAL FIRE preparedness – [readyforwildfire.org](http://readyforwildfire.org)

### **Vegetation Management**

- Vegetation Management – [sce.com/safety/power-lines](http://sce.com/safety/power-lines); contact 1-800-655-4555 or [safetrees@sce.com](mailto:safetrees@sce.com)

### **Customer Programs & Rebates**

- SCE Customer Programs & Resources – [sce.com/customerresources](http://sce.com/customerresources)
- SCE Marketplace (rebates and programs) – [marketplace.sce.com](http://marketplace.sce.com)
- SCE Critical Care Backup Battery Program – [sce.com/ccbb](http://sce.com/ccbb)
- SCE Access & Functional Needs Resources – [sce.com/afn](http://sce.com/afn)
- SCE Medical Baseline Program – [sce.com/medicalbaseline](http://sce.com/medicalbaseline)
- Self Generation Incentive Program (SGIP) – [sce.com/sgip](http://sce.com/sgip) or [selfgenca.com](http://selfgenca.com)
- SCE Customer Support: 1-800-655-4555

### **Community Meetings**

- Join SCE's wildfire safety community meetings – [sce.com/wildfiresafetymeetings](http://sce.com/wildfiresafetymeetings)

### **Energized by Edison**

- Stories and videos on SCE's wildfire mitigation efforts and PSPS – [edison.com/wildfire-safety](http://edison.com/wildfire-safety)