SOUTHERN CALIFORNIA EDISON®
Energy for What's Ahead®

2021 WILDFIRE MITIGATION PLAN UPDATE

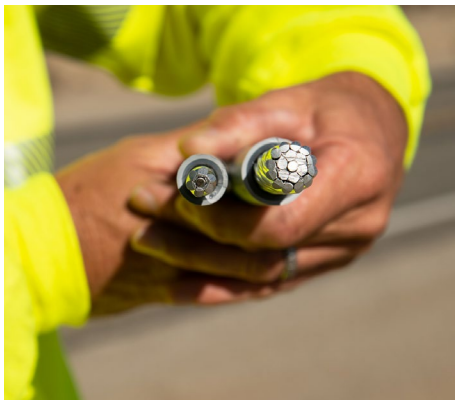
Southern California Edison's Wildfire Mitigation Plan outlines the measures we are implementing to reduce the risk of fire ignitions caused by our infrastructure to protect our customers and communities in high fire risk areas. As we continue to implement the 2020-22 Wildfire Mitigation Plan, we have invested $1.3 billion in 2020 and are on track to spend an additional $3.5 billion in 2021-2022. Our 2021 annual update builds on the progress we've made by expanding existing programs, incorporating lessons learned and testing new technologies. Over time, these measures will reduce the need for Public Safety Power Shutoffs (PSPS) in high fire risk areas and minimize the number of affected customers.

In 2021, we look forward to making significant progress in the following key focus areas:

- Refining our high fire risk inspections strategy to include inspections in targeted areas based on emergent conditions, including fire weather conditions such as dry fuels.
- Expanding our system hardening activities to include long-span remediation by installing line spacers on long power lines that are prone to conductor-to-conductor contact during windy conditions.
- Improving fire agencies' ability to detect and respond to emerging fires using satellite imagery and providing aerial fire suppression resources (e.g., helitankers) to fire agencies to help protect communities in SCE's service area.
- Establishing central data platforms for next-generation data analytics and governance.

GRID DESIGN & SYSTEM HARDENING

SCE continues to make improvements to its electrical system to make the grid more resilient in high fire risk areas, improving reliability and reducing wildfire risk.



Covered Conductor (Insulated Wire):

- The insulated material covering the bare wire significantly reduces the possibility of the power line from arcing or sparking if contact occurs with an object like a tree branch or metallic balloon.
- We plan to install an additional 1,000 miles of covered conductor in 2021.

Fire-Resistant Poles:

- We are installing a mix of composite poles and wooden poles with fire-resistant wrap, which reduces the risk of damaged poles during an emergency and allows us to safely restore power more quickly to customers.

Protective Devices:

- Fast-acting fuses interrupt electrical current more quickly and reduce risk of ignitions when there is an electrical fault, such as when a tree falls on a power line during high winds. We plan to install an additional 330 fast-acting fuses in 2021.
- We are also installing remote-controlled sectionalizing devices to segment or isolate portions of circuits during PSPS events to minimize the number of customers impacted.

Undergrounding:

- Underground wires can reduce the frequency of outages during storms and also reduce the risk of wildfires caused by electrical infrastructure. Although it can take much longer to construct and is more costly and difficult to maintain and repair, particularly in mountainous and rocky terrain, SCE is committed to determine locations where undergrounding can provide further meaningful wildfire risk reduction.
- We identified 17 miles of undergrounding for 2021-22 in targeted high fire risk areas based on risk and feasibility.

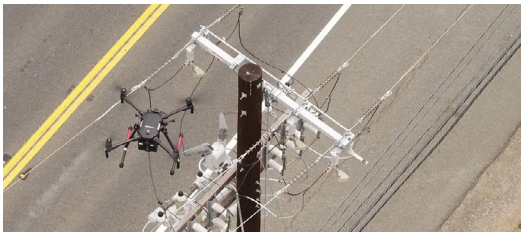
Microgrids

- Microgrids, or self-contained electric grids, can provide around-the-clock energy for a limited time and can operate while tied to the larger electric system and separated or "islanded" from it.
- SCE partnered with San Jacinto High School to launch a microgrid resiliency pilot. A second pilot site has been identified for a school in San Bernardino County to mitigate the impacts of PSPS for nearby communities.

HIGH FIRE RISK INSPECTIONS

SCE annually inspects its overhead transmission, distribution and generation equipment in high fire risk areas to identify potential safety hazards. We prioritize the highest-risk structures identified by our advanced risk model.

- Ground inspections by field crews and aerial inspections using drones and helicopters are conducted to obtain a 360-degree view of our equipment, where possible, for any needed maintenance, repair or replacement.
- We plan to inspect an additional 163,000 distribution assets and 16,800 transmission assets in 2021.



VEGETATION MANAGEMENT

We continue our efforts to inspect, trim and remove trees to prevent vegetation from coming into contact with electrical equipment and potentially sparking a fire. Tall trees that could potentially fall into power lines beyond our standard pruning zones are also assessed and mitigated.

- We inspect 1.4 million trees annually and prune nearly 900,000 of these trees. There are more than 700,000 trees in high fire risk areas.
- In 2021, we plan to assess at least 150,000 hazard trees in high fire risk areas and remove them if deemed unsafe.

SITUATIONAL AWARENESS

The size of our service area in high fire risk areas and its diverse terrain requires a dense network of weather stations and wildfire cameras to monitor location-specific, real-time conditions that help inform operational decision-making.

Weather Stations

- Weather stations provide wind speed, humidity and temperature data that is updated every few minutes. The data allows more targeted de-energizations during PSPS events and is accessible to the public at sce.com/weatherstations.
- We plan to install at least an additional 375 weather stations in 2021.

Wildfire Cameras

- Our high-definition wildfire cameras thoroughly cover our high fire risk areas and pan, tilt, zoom and perform 360-degree sweeps approximately every minute.
- Fire agencies and the public can view the camera feeds to monitor wildfire conditions at alertwildfire.org.

Weather and Fire Spread Modeling Technology

- We are increasing our computing power to be able to model the atmosphere at a higher resolution in order to produce more granular weather forecasts for improved PSPS decisions.
- We are evaluating fire spread modeling technology, which has the potential to determine impacts to communities from wildfires during extreme weather events.

NEW TECHNOLOGIES

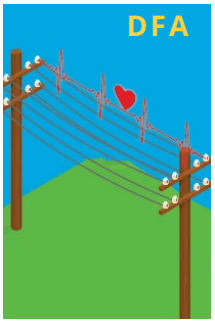
SCE is always developing new approaches and collaborates with other utilities, academia and the energy sector to make our communities safer. Here are emerging technologies that we will continue to apply, develop or advance in 2021.

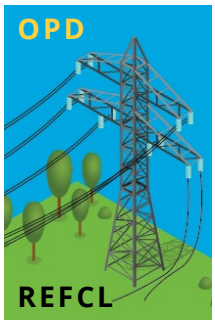
Technologies such as Early Fault Detection (EFD) and Distributed Fault Anticipation (DFA) help detect potential electrical equipment issues early so we can make repairs before the equipment fails.

- EFD uses radio frequency sensors placed on power poles to "listen" for abnormal radio frequency signals on power lines that indicate potential problems, such as frayed power lines.
- DFA reads and monitors current and voltage signatures on circuits to better predict potential problems. These units are installed inside our substations and provide valuable data to also aid with reducing repeated events.

Technologies such as Open Phase Detection (OPD) and Rapid Earth Fault Current Limiter (REFCL) can sense when electrical equipment fails and take action to prevent potential ignitions.

- OPD can sense when a power line breaks or separates and turns off the power before it even falls to the ground.
- REFCL systems can sense when a power line experiences a ground fault and immediately reduces the voltage on the line to minimize ignition possibility. Examples of ground faults include downed power lines and other causes that can produce sparks, such as wildlife or vegetation contacting power lines.





Artificial Intelligence & Machine Learning

- We use computer software that leverages artificial intelligence and machine learning to review high-quality images of our equipment captured during inspections to automatically identify equipment that may need maintenance, repair or replacement with more accuracy and speed.
- We are beginning to use high-tech satellite imagery to detect plumes of smoke when fires start and compare them with other fire detection systems like our wildfire cameras.

PUBLIC SAFETY POWER SHUTOFFS

We strive to reduce the size, frequency and duration of PSPS events as more wildfire mitigations are implemented, but PSPS remains a tool to mitigate wildfire risk during extreme fire weather conditions.

- After PSPS events, SCE crews have found equipment damage and tree branches contacting lines that could have ignited fires, illustrating the importance of this critical tool of last resort.
- We are actively engaging with customers, particularly vulnerable populations, so they are prepared for PSPS events and other outages. Community Resource Centers and Community Crew Vehicles are also available to support customers during PSPS events.
- We offer rebates on portable back-up battery solutions, hotel discounts and other programs to help customers during PSPS and emergencies. We will also provide no-cost backup batteries and solar panels to eligible income-qualified customers who rely on medical equipment and live in a high fire risk area.

To learn more about wildfire safety and PSPS, visit sce.com/wildfire.

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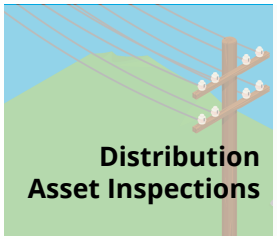
Wildfire Mitigation Activities
SCE SERVICE AREA

2020 Year-End Progress Report

Data as of 12/31/20



Distribution Asset Inspections

2020 Completed/Target
199,000/105,000
assets inspected

190% **completed**

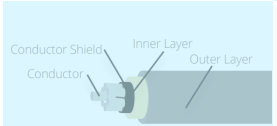
Completed Since 2018
584,300
assets inspected

Transmission Asset Inspections

2020 Completed/Target
35,500/22,500
assets inspected

158% **completed**

Completed Since 2018
86,100
assets inspected

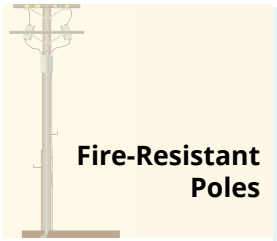


Covered Conductor

2020 Completed/Target
960/700
circuit miles installed

137% **completed**

Completed Since 2018
1,480
circuit miles installed

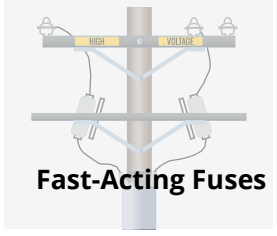


Fire-Resistant Poles

2020 Completed/Target
6,090/5,200
poles installed

117% **completed**

Completed Since 2018
7,510
poles installed



Fast-Acting Fuses

2020 Completed/Target
3,025/3,025
fuses installed

100% **completed**

Completed Since 2018
12,900
fuses installed

Sectionalizing Devices

2020 Completed/Target
49/45
devices installed

109% **completed**

Completed Since 2018
100
devices installed

Hazard Tree Management

2020 Completed/Target
99,500/75,000
trees assessed

133% **completed**

Completed Since 2018
228,500
trees assessed

Weather Stations

2020 Completed/Target
590/375
weather stations installed

157% **completed**

Completed Since 2018
1,050
weather stations installed

High-Definition Wildfire Cameras

Cameras thoroughly covering our high fire risk areas were installed by 2020.

Completed Since 2018
166
cameras installed

Community Resource Centers

56
sites available

Community Crew Vehicles

8
vehicles available