



OUTAGE & RESTORATION GUIDE FOR BUSINESS



Learn how to prepare, stay informed, and keep you, your customers, and employees safe in the event of a power outage.

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KEEPING THE LIGHTS ON

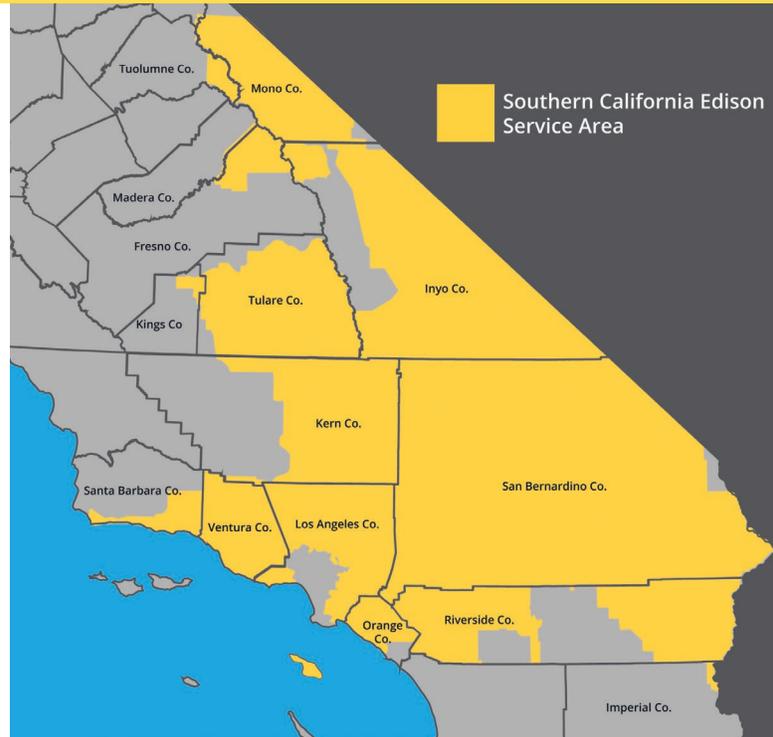
Power. It's something we all rely on every day, and it's something we often take for granted — until an outage occurs. At SCE, we understand safe and reliable power is important to your daily life and we know you depend on us to keep the lights on. What's important to you, is important to us. That's why, if a power outage occurs, we want to help you be prepared, remain safe, and stay informed. While the safety of the public, customers, and employees is our top priority, it is important to us to meet your expectations by continuously improving your power outage experience.

This guide explains the different types of power outages, how SCE restores your power, and how you can prepare before, during, and after a power outage occurs, including Public Safety Power Shutoff events.

OUR OUTAGE CENTER

Our online Outage Center at sce.com/outage is where you can report an outage, view the outage map, and stay informed. It's also where you can sign up to receive notifications, by your choice of email, mobile text, and/or automated phone message about outages that may affect your service. You may also visit the Outage Center to check the status of an outage and get tips to help you stay safe and comfortable during an outage.

Sign up for outage alerts today at sce.com/outagealerts.



By the Numbers: How We Do It

- 12,635 miles of transmission lines
- 91,375 miles of distribution lines
- 1,433,336 electric poles
- 720,800 distribution transformers
- 2,959 substation transformers
- 285,000 business customers we serve

Potential Impact of Power Outages

Power outages can impact the whole community and economy. As a business, you and your staff can face a variety of hazards when it comes to power outages. However, there is much you can do to prepare your business and facilities.

Use this guide to become familiar with the different types of outages that may occur and actions you can take to protect employees and customers, as well as help ensure business continuity.

WHAT WE'RE DOING TO PROVIDE RELIABLE SERVICE EVERY DAY.

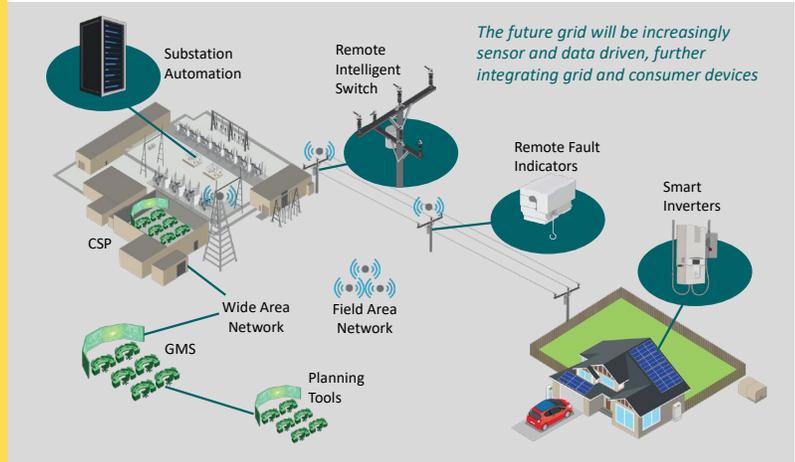
We're executing our long-term plan to upgrade and modernize the grid, improve reliability, and support new energy technologies. The modern grid helps us monitor, control, connect, predict, and optimize energy distribution for California's changing energy needs.

What we're doing to mitigate wildfire risk.

Six of the most destructive California wildfires have occurred since 2017. In November 2018, almost two million acres burned, and close to 100 lives were tragically lost due to catastrophic wildfires exacerbated by climate change. The widespread destruction of wildfires is a major threat to the safety of our communities, the health of our economy and California's ambitious goals for reducing greenhouse gas emissions. Wildfire risk is increasing at the same time that more and more residential and commercial development is occurring in some of the highest-risk areas — with about a quarter of SCE's service area in high fire risk areas.

SCE has long taken substantial steps to reduce the risk of wildfires in its territory, including employing robust design and construction standards, vegetation management activities and operational practices. Today, we're going beyond standard industry practices to address the new conditions we face and reduce the risk of electrical equipment igniting wildfires. Our Wildfire Mitigation Plan is part of a larger, ongoing effort and incorporates and builds on our \$582 million Grid Safety and Resiliency program.

THE GRID OF THE FUTURE



GRID MODERNIZATION

- 1. Automation:** Adding distribution and substation technology to gather data, monitor, and manage grid resources in real time.
- 2. Communications:** Upgrading communication networks, such as expanding the fiber optic and field area networks to support timely data transport.
- 3. Technology Platforms:** Developing improved analytics platforms for planning, operations, outage management, and interconnection.
- 4. Grid Reinforcement:** Updating infrastructure to address capacity, reliability, and equipment obsolescence.

NEW EQUIPMENT TECHNOLOGIES

Replacing current grid equipment with new technologies also helps reduce wildfire risks.

New equipment technologies include:

- **Insulated wires:** Reduce the chance of faults or short circuits that may create sparks when animals, vegetation, or other debris contacts the lines.
- **Composite poles:** Manufactured to be stronger and more resilient than wood poles.
- **Fast-acting fuses, advanced lightning arrestors, and other devices:** Quicker reaction time to minimize fire risk.

TYPES OF OUTAGES

MAINTENANCE OUTAGE

A maintenance outage is a planned, controlled outage. They're necessary for upgrading electrical equipment and modernizing our grid to better serve you.

What to expect BEFORE a Maintenance Outage

We'll notify you in advance of a maintenance outage.

- Letters are mailed to you for receipt 3 to 8 days prior to the outage.
- If you sign up for alerts at [sce.com/outagealerts](https://www.sce.com/outagealerts), you'll receive automated notifications several days in advance by your choice of email, mobile text, or automated phone call.
- Your city and county also receive emails containing information regarding all maintenance outages scheduled to occur in their areas the following week.

Your notifications include an Outage Number, so you can check your outage status in real time at [sce.com/outage](https://www.sce.com/outage).

What to expect DURING a Maintenance Outage

- You may see SCE crews in your neighborhood, and there may be road closures or increased traffic — so you may want to plan to add some extra time to your commute.
- We may have to turn power on and off more than once during the maintenance process.
- As soon as our crews report when power will be restored, our online Outage Map will show the updated information.



HELPFUL TIP

Install surge protectors on all important equipment and electronics.
Create a list of critical equipment that must be turned off during an outage to prevent damage.

What to expect AFTER a Maintenance Outage

There should be little (if anything) for you to do once power is restored:

- Reset your clocks, automatic timers, and alarms.
- Plug in appliances and electronics, if any were unplugged prior to the outage.

TYPES OF OUTAGES

REPAIR OUTAGE

Unexpected events may cause repair outages. Whether it's a car crashing into a utility pole, high temperatures causing energy demand to overload power lines and transformers, severe weather, or something as simple as a metallic balloon caught in a line, an outage may occur. Whatever the cause, preparation will help your family stay safe and comfortable while we work to restore your power.

METALLIC BALLOON OUTAGES

Past 5 Years



How to prepare BEFORE a Repair Outage

- Register at sce.com/outagealerts to receive outage alerts. You may choose to be notified via email, text, or automated phone call. Stay informed by visiting our online Outage Center at sce.com/outage.
- **Place flashlights** in handy locations and test them regularly to ensure they're in working order. Keep a supply of batteries.
- **Save important phone numbers** (fire department, police, hospital) near the phone and on your mobile device.
- Have alternative charging methods available for mobile phones. See <https://energized.edison.com/stories/7-ways-to-keep-your-phone-charged-during-an-outage>.
- **Learn how to manually open** any automatic doors, gates, and security access entrances, including those requiring card access.

What to do DURING a Repair Outage

First and foremost, make **safety** your **first** priority until our crews can locate and repair damage. We work hard to restore power as quickly and safely as possible.

- Remember to **never go near a downed power line** and **call 911** to report it. Stay clear of pooled water, and do not touch anything in contact with the wire or water.
- As soon as we have information from our crews about when the power will be restored, our online Outage Map will reflect it.
- **Be patient** — depending on the amount of damage, the amount of time to restore power may vary.

HELPFUL TIP

Keep refrigerated units and freezer doors closed to help keep food cool.



TYPES OF OUTAGES

ROTATING OUTAGE

While extremely rare, controlled power outages are enacted when there is a statewide emergency, to help ease the demand on the overall electrical grid. Rotating outages last for one hour, rotating through geographical groups to prevent larger, longer power outages.



We contact the news media, especially radio and television stations, and ask them to broadcast outage news immediately. We may have as few as 10 minutes after officials of the California Independent System Operator (CAISO) declare a Stage 3 Emergency before we begin rotating outages. This is not enough time to provide individual notifications for impacted customers. You can check online at [sce.com/outage](https://www.sce.com/outage) or call us at 1-800-611-1911 to find out whether you will be impacted.

How to PREPARE for Rotating Outages

- Plan ahead — learn your business location's assigned rotating outage group numbers, which are found at the top of SCE bills and searchable at [sce.com/rotatinggroup](https://www.sce.com/rotatinggroup) by entering a ZIP code.

Note: Customers in rotating outage group N001 are normally not subject to rotating outages.

- Turn off electronic equipment. This helps prevent circuits from overloading when power is restored.



HELPFUL TIP

Leave one light on to indicate when power has been restored. You can help prevent damage to your electronics by unplugging — computers, monitors, printers, etc. After electricity is restored, you can plug them in again.

TYPES OF OUTAGES

PUBLIC SAFETY POWER SHUTOFF (PSPS)

Another proactive measure we've taken to reduce wildfire risks is Public Safety Power Shutoff (PSPS). During these events, we proactively shut off power in high fire risk areas because of elevated weather conditions. Turning off our customers' electricity is not something we take lightly. PSPS events allow us to do our part to contribute to the safety of the public, our customers, and our employees.

HELPFUL TIP

Develop a business continuity plan that defines employee roles and responsibilities during an electric outage. You can find comprehensive information and samples at [ready.gov/business](https://www.ready.gov/business). Update your outage alert contact information at [sce.com/outage](https://www.sce.com/outage) or call **1-800-655-4555**.

What you can expect BEFORE a PSPS event

- **2 Days Ahead (or as soon as your circuit has been identified):** When elevated weather conditions are forecast, we assess the potential impact and coordinate with the emergency management community, first responders, and local government. We notify potentially affected customers.
- **1 Day Ahead:** When elevated weather conditions persist, we notify affected customers again.
- **Power Shutoff:** Once elevated weather conditions are confirmed, we shut off the power in affected areas and notify affected customers.
- **After Restoring Power:** After weather conditions return to safer levels, our field teams ensure it is safe to restore power. We send a notification indicating power is restored.

Notifications may occur via phone call, text, [sce.com](https://www.sce.com), email, and social media. It is important you register for outage alerts to receive this information. If you haven't already signed up for alert notifications, do so now at [sce.com/outage](https://www.sce.com/outage).

Certain situations may prevent SCE from providing advance notice. The status of PSPS and other power outages is available online at [sce.com/outage](https://www.sce.com/outage).

PREPARE NOW

A PSPS event will last as long as the dangerous fire weather conditions exist. If circuits are shut off, those circuits and lines will be inspected to ensure there are no problems that might create a danger before power can be safely restored. SCE crews will need to visually inspect the power lines during daylight hours so operations may be limited during overnight hours. Businesses should be prepared to be without power for an extended period during a PSPS event. Conduct employee awareness training to educate staff on the safest response before, during, and after an event. Develop and maintain emergency supply kits. For more information visit [sce.com/beprepared](https://www.sce.com/beprepared).



HOW WE RESTORE POWER

Our grid modernization efforts help us react, communicate, and restore power as quickly as possible during outage events. But when a power outage occurs, be sure to make safety your top concern until our crews can locate and repair damage. Remember: Never go near a downed power line. We are continually working to optimize our response and restoration times. Our teams are trained to restore power through a three-phase process to get your lights back on as quickly and safely as possible.

Phase 1: Assess & Protect: Safety is Key!

We send highly-trained workers into the field to locate and monitor safety hazards. These hazards may include downed wires and poles. Power may be turned off to ensure you, your family, and your neighbors are safe while repairs are made. Crews may re-route power to critical facilities like hospitals, fire stations, and other essential services, when possible.

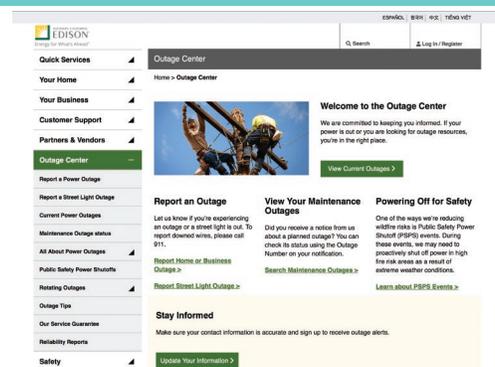
Phase 2: Repair Damage

Simultaneously, repair crews are dispatched. As damage is assessed and safety measures are enacted, the crews begin repairing substations, main electric lines, and wires to restore your power. Even if you do not see our crews, rest assured we're working nearby to get your power restored. New smart technology allows us to more accurately estimate when repairs will be finished.



Phase 3: Restore Power

Our goal is to safely restore power as quickly as possible, and ensure you are updated with the cause of the outage and when we estimate power will be restored. Visit sce.com/outage to view our Outage Map and obtain real-time information about current outages and estimated repair times. Sign up to receive updates via email, mobile text, or phone at sce.com/outagealerts.



BE PREPARED

Business Preparation Tips.

- Update your outage alert contact information at [sce.com/outagealerts](https://www.sce.com/outagealerts) or call **1-800-655-4555** to receive regular updates on our power restoration progress.
- Establish a “power outage response team” to initiate response protocols established by your business resiliency plan in the event of an outage.
- Create a hardcopy list of emergency phone numbers — police, fire, hospital, and emergency management, and post for your employees.
- Develop internal and external communications protocols to keep staff informed.
- Make sure employees are aware and trained on safety response protocols, include such items as:
 - Procedures for disconnecting and powering down equipment
 - Procedures for entering and exiting the facility
 - Requirements for data backup and retrieval
 - Work-from-home requirements
 - An emergency plan for employees who rely on medical equipment — this may include instructions on a backup power supply or transportation to another facility
- Discuss basic first aid and CPR training, evacuation routes, and communication protocols.
- Ensure emergency lighting, signage, and exit signs are operable and clearly visible.
- Install carbon monoxide detectors with battery backup in central locations throughout your business to ensure they continue to function and alert you of toxic emissions.
- Review building security and safety systems, and establish mitigation solutions. Ensure you have complimentary plans for communicating shipping and receiving delays, back-up generator requirements, and banking support.
- **If you see a downed power line, do not touch it. Call 911 immediately and keep others away.**

Backup Generation

Backup electric generators can be part of any business continuity plan. Generators can be dangerous if connected or used improperly. Before use of a generator, consult an electrician to determine proper equipment and safe set up for your business.

There are two main types of generators, each with its own characteristics, benefits, and disadvantages. A professional electrician can help you determine the best option for your business.

- **Permanent standby generators** are permanently connected to a building’s electrical system. When a power outage occurs, these generators automatically restore power to the building. Standby generators are typically powered by diesel fuel or natural gas.
- **Portable generators** run on gasoline or diesel fuel, and must be manually activated once a power outage occurs.

Backup generators must meet electrical codes and have a transfer switch to prevent dangerous back-feeding of electricity onto SCE’s power lines. Back feed onto power lines can endanger the lives of SCE crews who may be working on downed power lines. Always consult a licensed electrician to determine the right equipment and safe set up.

SCE Requirements

Prior to installing a backup generator connected to your business’ electrical system, an application for interconnection with SCE needs to be completed pursuant to California Health and Safety Code Section 119085 (b). For questions, email interconnectionsQA@sce.com or call **1-626-302-3688**.

EMERGENCY SUPPLY KIT CHECKLIST

Develop an emergency kit with supplies and have multiples on hand to accommodate all employees.



First Aid Kit

In addition to the typical items, include antiseptic towelettes, examination gloves, burn creams, eye wash, cotton tip applicators, and scissors.



Bottled Water

Experts recommend a gallon of water per person per day.



Food

Include non-perishable, easy-to-prepare (without electricity) food for your employees.



Flashlights & Batteries

Store them where you can easily find them, and ensure batteries are replaced regularly.



Battery or Crank-Operated Radio

This can be used to access news reports or other important messages if your phone and internet are not available.



Special Needs Items

This includes items for the disabled.

For additional tips, visit sce.com/outage.





P.O. Box 800
Rosemead, CA 91770

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CONTACT US

Report an outage: 1-800-611-1911 or [sce.com/outage](https://www.sce.com/outage)

Update your outage alert preferences: [sce.com/outagealerts](https://www.sce.com/outagealerts)

Rotating Outage Group Information: 1-800-611-1911 or visit [sce.com/rotatingoutage](https://www.sce.com/rotatingoutage)

Maintenance Outage Updates: 1-888-759-6056 or visit [sce.com/outage](https://www.sce.com/outage)

Generator Operation: 1-888-759-6056, press 2

Public Safety Power Shutoff — Am I Impacted? [sce.com/PSPS](https://www.sce.com/PSPS)

BUSINESS ONLINE RESOURCES

ready.gov/business

prepareforpowerdown.com