

RELIABILITY

Frequently Asked Questions

As California transitions away from fossil fuels, electricity will play an increasing role in meeting our energy needs. Customers want to be assured that the electric grid can be relied upon in the clean energy future.

CAN THE GRID HANDLE THE INCREASED LOAD FROM ELECTRIC VEHICLES AND ALL-ELECTRIC BUILDINGS?

The answer is an emphatic yes, based on SCE's [data-driven analysis](#) of what it will take for the state to achieve its 2045 carbon-neutrality goals. With the necessary investments we have outlined, we project that our grid and energy supply will be able to keep up with the additional demand for electricity in the coming decades. We also have time to plan ahead.

Our recently published white paper, [Reimagining the Grid](#), presents SCE's vision for providing an electric grid that enables the efficient integration of clean resources while also adapting to other needs driven by customers and climate change. If legislators, regulators, local governments, utilities and other stakeholders act expeditiously, we can implement the necessary upgrades for any additional demands from electrification.



WHAT IS BEING DONE TO PREVENT ROTATING OUTAGES FROM OCCURRING AGAIN?

SCE, in partnership with state energy regulators, is working on a variety of solutions to address the region's long-term reliability needs. With climate change, more intense and longer heat waves are expected in the coming decades. Before the rotating outages of August 2020, SCE and the state identified the need for more generation capacity and are actively bringing new resources online. Reliability planning needs to adjust as we transition responsibly to a low-carbon grid and as climate change continues to add additional uncertainty to grid planning.

In 2020, SCE signed various energy storage contracts totaling more than 1,300 megawatts, which will help support reliability of the region's electric system and mitigate future rotating outages. These contracts increase SCE's total amount of installed and procured battery storage capacity to approximately 2,050 MW, or roughly enough electricity for the instantaneous demands of 1.5 million homes.



WILL PUBLIC SAFETY POWER SHUTOFFS (PSPS) CONTINUE TO BE A RELIABILITY ISSUE IN THE FUTURE?

As additional wildfire mitigations are deployed, we expect to reduce the scope and impact of PSPS outages, but PSPS will remain as a necessary tool to reduce wildfire risk during severe weather events. Today, about 21% of SCE's circuits are in scope for PSPS. The vast majority of our circuits are not.

We are implementing additional safety measures that will reduce the need for PSPS, including installing covered conductor, additional switches and Early Fault Detection technology. We are improving vegetation management and situational awareness as well. While reducing the risk of wildfires, these grid-hardening measures also improve reliability by reducing the number and scope of interruptions caused by foreign objects coming into contact with the electrical system.

In addition to grid hardening, an increase in distributed energy resources will also contribute to energy resilience. SCE forecasts that by 2045, a significant proportion of single-family homes will be served using some combination of rooftop solar and energy storage. These distributed energy resources will provide carbon-free energy, lower bills and improve energy resiliency.



WHAT IS SCE DOING TO HARDEN THE GRID AGAINST THE THREAT OF CLIMATE IMPACTS, SUCH AS WILDFIRES AND HEATWAVES?

Climate change places new and changing demands on our entire electric system, requiring us to both mitigate and adapt to increasing average and extreme temperatures, changes in precipitation, increased wildfire threat and sea level rise.

SCE is proposing to invest more than \$5 billion annually in the grid, including improvements to build resiliency. We're rethinking how we design and operate the grid to better adapt to these threats. We're also strengthening our operations by leveraging the latest digital technologies. We are enhancing partnerships with local and state emergency management and first-responder agencies, ensuring customers understand how to stay safe around electrical infrastructure, and are working with our communities to better understand how we can partner on climate adaptation. Our [Wildfire Mitigation Plan](#) is designed to further harden infrastructure against wildfire, bolster situational awareness capabilities, enhance operational practices and harness the power of data and technology.



HOW DO WE MAINTAIN RELIABILITY AS WE TRANSITION THE GRID TO 100% CARBON-FREE SOURCES?

The energy landscape is changing, and we are meeting these challenges by modernizing our distribution system, leveraging increasingly sophisticated hardware and software to manage a complex and intelligent grid. We are also aggressively deploying utility-scale energy storage projects. SCE is working to unlock the potential of customers' energy management through new Time-of-Use rate structures and demand response programs, where customers are rewarded for using energy at times that help improve reliability and maximize the use of carbon-free energy.

Enhanced integration of the interstate transmission system could bring significant economic and reliability benefits as neighboring states also transition to more carbon-free energy resources. Investing in transmission could help unlock greater resource diversity and flexibility. We are also working with renewable power producers to integrate these generation resources with storage, making the energy available when it's needed most. Together, these solutions will help ensure we can continue to depend on the grid as we electrify our homes and vehicles for a clean energy future.

