

Edison on the Front Lines of the War on Cyberattacks

SCE's parent helps lead electric utility, government partnership to safeguard the expanding power grid from cybercriminals.

As SCE expands the electric grid to support a clean energy future, a wide range of interconnected resources – utility-scale solar, wind and geothermal projects, large energy storage facilities and climate change-resilient distribution networks – will be needed to accomplish the goal of net-zero greenhouse gas emissions by 2045.

That presents a daunting cybersecurity challenge. As those interconnected networks multiply the digital attack surface, criminals bent on exploiting vulnerabilities for political or financial gain are also expanding their capabilities. The nightmare scenario of a cyberattack on the electric grid sparking an economic catastrophe is not merely a theoretical risk.

“A single significant cyber event has the potential to trigger widespread cascading failures spanning multiple sectors across the country,” said Pedro Pizarro, Edison International president and CEO, at the recent CERAWEEK energy industry conference. “Without power, our country’s communications, water and transportation systems risk degrading or failing completely.”

A “Defense-in-Depth” Strategy

Pizarro told CERAWEEK attendees that Edison International fended off almost a billion unauthorized attempts to access the company’s networks last year. A companywide “defense-in-depth” strategy is being used to deflect those attempts and stop cybercriminals “making it past the first moat” and gaining insider-like access to proprietary networks.

“Cybersecurity is no longer a single team or department. Every Edison employee plus our contractors are part of our cybersecurity team,” Pizarro said. “We all train, demonstrate and continuously improve our cyber defense skills – identifying phishing attempts, reporting malicious cyber activity and protecting critical data.”

Appearing with Pizarro was Jen Easterly, director of the U.S. Cybersecurity and Infrastructure Security Agency. She said the biggest threat facing the nation’s utility industry comes not from Russia, which is bogged down in a war with Ukraine, but rather from China.

“Russia is the hurricane, and China is climate change,” Easterly said.

Easterly and Pizarro agreed that securing critical infrastructure will require cooperation from all stakeholders, including energy companies working together to share threat information and defensive practices, as well as working with the government to build relationships before a potential crisis occurs.

Pizarro said Edison is striving to be a leader in creating resilient networks to support the grid, which undercuts the goals of those who may try to attack it. “We ask ourselves every day: ‘Are we doing enough to defend against adversaries that may want to disrupt power flow? Are we doing enough to stop the cybercriminals who may want to exploit our customer or employee data?’”

Pizarro added that “the electric power industry is the backbone of other critical infrastructure sectors. Our resilience challenge is about protecting critical infrastructure and meeting our climate goals by building consumer confidence in a secure, clean energy future.”

To learn more about Edison’s cybersecurity work, visit [edison.com/innovation/cybersecurity](https://www.edison.com/innovation/cybersecurity). Details on Edison’s clean energy initiatives are available at [edison.com/clean-energy](https://www.edison.com/clean-energy).



*As part of companywide work to defend against cyberattacks, Edison continues to create resilient networks to support the grid.
Photo credit: Kelly Beck*

SCE Improves Grid Safety, Significantly Reduces Wildfire Threat

We have reduced the probability of catastrophic wildfires associated with our equipment by about 75%-80% since 2018.

SCE recently submitted our **2023-2025 Wildfire Mitigation Plan** (WMP) to California’s Office of Energy Infrastructure Safety. This year’s plan details our strategy to continue grid hardening with covered conductor, also known as coated wire, and undergrounding more power lines in locations with the highest wildfire risk.

“We plan to further reduce the risk of wildfires and the impact of Public Safety Power Shutoff (PSPS) in this three-year phase of the WMP through grid hardening and customer care programs, building on the steady work we have completed over the past few years,” said Steven Powell, president and CEO of SCE. “We understand the impact our customers in high-fire-risk areas have faced from the threat of wildfires and the PSPS program that prevents wildfires.”

Installation of 2,850+ More Miles of Covered Conductor

The 2023-2025 plan includes a range of measures and key staples from previous plans. These include grid hardening primarily through the installation of covered conductor, enhanced vegetation management and advanced monitoring and alert systems to enhance situational awareness during dangerous weather events – all of which are vital to preventing ignitions from utility infrastructure. The plan further outlines the continued use of drones and helicopters to inspect more than 250,000 structures each year in high-risk areas to determine the potential need for repair or replacement.



The plan prioritizes the installation of covered conductor in areas of higher wildfire or PSPS outage risk. We plan to install more than 2,850 additional miles of covered conductor during this plan period. By the end of 2025, we expect to have replaced more than 7,200 miles, or about 75%, of overhead distribution power lines in high-fire-risk areas with covered conductor.

“Our 2023-2025 plan builds on the significant progress of our wildfire mitigation program over the past four years – progress that is necessary as we witness the devastating effects of extreme weather,” said Jill Anderson, executive vice president of Operations for SCE. “Our wildfire mitigation efforts will add resiliency to the electric system as we navigate a changing climate and move toward increased electrification in the economy.”

We have identified specific high-risk areas across our service area where the undergrounding of power lines will be prioritized. We are evaluating several hundred miles of power lines for undergrounding and plan to complete about 100 miles by 2025 to address the high risk presented by limited exit and entry points

to communities, extreme potential consequences and other factors.

In addition, we are expanding our partnership with fire agencies in our service area by moving to a year-round Quick Reaction Force (QRF) of aerial firefighting resources. The QRF includes helitankers, reconnaissance aircraft and equipment to bolster firefighting. These capabilities help to reduce a fire’s consequences, provide service resilience to customers and protect electrical infrastructure.

Visit [edison.com/wildfire-safety](https://www.edison.com/wildfire-safety) for more information about SCE’s Wildfire Mitigation Plan.

Join Us for SCE's Asian American and Pacific Islander Heritage Month Event

Registration is open for SCE’s annual Asian American and Pacific Islander (AAPI) Heritage Month celebration, which will take place virtually on Friday, May 12, 2023, from 9:30 a.m. to 11:30 a.m.

The event will recognize organizations and companies that advance the efforts and contributions of the AAPI community, with awards presented in the categories of Diversity, Clean Energy, and Community Partnership. Attendees also will enjoy special guest speakers, entertainment, virtual exhibitors and more.

To register, visit [sceheritageevents.com](https://www.sceheritageevents.com). If you are interested in exhibiting, see our [exhibitor event page](#) for details.