Enhanced Wildfire Safety Strategy

2025–2027

Hawaiian Electric

Hawai'i is experiencing fiercer and more frequent wildfires driven by climate change, human activity, shifts in land use, and invasive vegetation. Hawaiian Electric first began developing the Wildfire Safety Strategy in 2019 and updated it in 2023.

Our enhanced 2025-2027 strategy builds on the actions we've taken to date and outlines short-, mid-, and long-term initiatives to reduce the risk of wildfires igniting from our equipment.

Grid hardening and redesign Upgrading infrastructure and improving reliability impacts resulting from safer operational practices

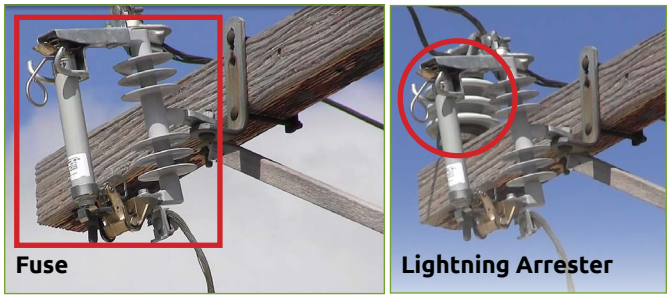
Wood Pole Replacements and Upgrades

In 2024, we replaced and upgraded 2,124 wood poles and tested 5,805 poles. We also replaced more than 23 miles of overhead lines with new, more resilient lines. We're adding steel mesh to wooden poles to act as a fire retardant and increase resistance to insects.

Crews are working to replace, upgrade, and test poles.

Fuse and Lightning Arrester Replacements and Upgrades

Fuses protect equipment and isolate electrical problems to smaller areas. In 2024, we replaced and upgraded 3,558 fuses and 680 new lightning arresters to reduce the risk of ignition and protect electrical equipment from power surges and lightning strikes.



Fuses and lightning arresters have been replaced and upgraded on Hawaiian Electric equipment.

Covered Conductors

Covered conductor is a heavy-duty insulating material placed on power lines to help prevent traditional bare wires from sparking if they touch objects or another line or fall to the ground. In the next three years, we plan to deploy covered conductor in the highest risk areas.

Crews work to install covered conductors on Hawaiian Electric equipment.

Strategic Undergrounding

Hawaiian Electric is committed to identifying sections of its distribution system where undergrounding is the most efficient way to prevent fires. However, undergrounding is 5-10 times more expensive than an equivalent overhead powerline and will be implemented in strategic areas where this type of wildfire prevention will be most impactful.

Strategic undergrounding of powerlines can greatly reduce the risk of wildfires in impacted areas.

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Situational awareness

Situational awareness is the ability to monitor environmental conditions to make operational decisions in an effective and timely manner. We use equipment and resources to help us watch high-risk areas and detect wildfires early. This gives us more information to make real-time decisions about our operations to support public safety.

Video Cameras

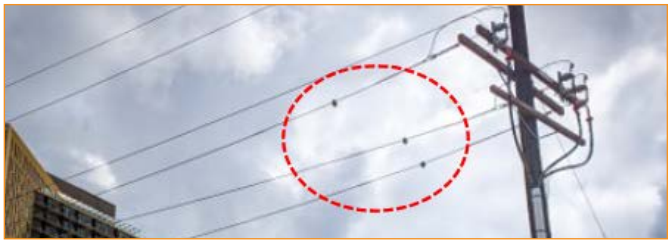
A network of high-definition video cameras can help quickly detect wildfires. Cameras gather on-the-ground data using artificial intelligence (AI) technology to provide enhanced situational awareness and early detection of ignitions near company infrastructure in real-time. In 2024, we installed 44 camera stations in elevated fire risk areas across the islands. In the next three years, we plan to install more cameras in all high and medium wildfire risk areas.

- ALERTWest provides 24/7/365 monitoring for potential ignitions.
- View the camera feeds at https://www.alertwest.live

AI assisted cameras continually monitor areas of high risk and send alerts to Hawaiian Electric and first responders when anomalies are detected.

Fault Current Indicators

Fault current indicators allow crews to more quickly locate disturbances on lines in high-risk areas. In 2024, we installed 3,177 single-phase fault current indicators.



Fault current indicators detect where a fault has occurred and shorten response times.

Weather Stations

Weather stations provide key information about wind, temperature and humidity to help us better predict and respond to fire weather conditions. In 2024, we installed 53 stations in wildfire-prone areas on four islands. The stations are mounted on utility poles and provide meteorological data that will help us decide whether to activate and deactivate a Public Safety Power Shutoff. In the next three years, we plan to add more weather stations in all high and medium risk areas.

Newly installed weather stations are equipped with meteorological tools such as temperature sensors, radiation shields, anemometers, and solar panels to keep them powered.

Spotters

During red flag conditions issued by the National Weather Service, we may deploy human spotters to strategic locations on all islands in our service territory. Spotters are trained to call the appropriate company personnel to report hazardous observations and provide information from the field.

Watch Office

In the next three years, we plan to implement a wildfire-focused Watch Office that will monitor media reports, internal and external weather products and field reports to provide more situational awareness within Hawaiian Electric.

Hawaiian Electric

Operational practices

Improving our operational practices and tools will reduce ignition risks and enhance safety and reliability across the islands.

Inspections

Our wildfire asset inspection program provides for frequent inspections of our transmission and distribution assets in wildfire risk areas to reduce the potential for component failure and ignitions as well as strengthen system reliability. We increased inspections in high-risk areas, including manual inspections as well as drone and helicopter inspections in hard-to-reach locations. In the next three years, we plan to enhance inspections of electrical assets.

Crews regularly inspect Hawaiian Electric equipment in high-risk areas either manually or via drone or helicopter.

Enhanced Fast Trip and Reclose Blocking

Enhanced Fast Trip (EFT) is a protective setting that automatically shuts off power more quickly when a disturbance is detected, such as a tree branch brushing against a line. Reclose blocking prevents attempts to automatically re-energize the line. Lines will remain de-energized until a visual inspection is performed and the lines are deemed safe to energize. Customers in high-risk areas may experience outages that are more frequent and longer in duration than in the past.

Enhanced Fast Trip and Reclose Blocking equipment helps detect disturbances to Hawaiian Electric equipment and alert the team of the need for a visual inspection.

Vegetation Management

We regularly inspect trees growing into power lines along roadways and, if necessary, contract certified vegetation management crews to trim them. Our comprehensive wildfire vegetation management program will incorporate tree pruning, tree removal, brush control/removal, and ground clearing around higher-risk infrastructure. In the next three years, we plan to expand hazard tree removal and create wider rights-of-way for vegetation clearing. For work within easements and rights-of-way, partnerships with the state, counties, utilities, and landowners are needed.

Crews perform regular vegetation management, such as trimming trees in areas adjacent to Hawaiian Electric powerlines.

Public Safety Power Shutoff (PSPS)

A Public Safety Power Shutoff (PSPS) is our **last line of defense** to keep communities safe from the threat of wildfires. We may need to preemptively shut off power in certain high-risk areas during severe weather events, when the danger of wildfire is high. While every situation is unique, the three primary criteria for declaring a PSPS are:

- Persistent drought conditions
- High wind gust speeds
- Low relative humidity

The duration can vary from a few hours to several days. We're working closely with public safety partners and essential service providers and will keep the public informed before, during and after a PSPS.

Learn more about PSPS and how to prepare at **hawaiianelectric.com/PSPS**

Try our searchable maps to see if your location may be impacted by a PSPS: **hawaiianelectric.com/pspsmaps**

Stakeholder and community partnerships

Guided by a commitment to "meet people where they are," Hawaiian Electric engages partners and the public through tailored outreach and collaborative events. We work closely with stakeholders from across government and the private sector, including emergency response agencies, government officials, essential service providers and businesses.

Wildfire Safety Symposium

In April 2024, we invited wildfire safety experts from utilities, agencies, research institutes, and the state to a two-day technical symposium focused on reducing Hawai'i's wildfire risk. The objective was to bring diverse organizations together to collaboratively address continuing and emerging threats posed by increasingly extreme weather and climate change.

Wildfire safety experts share insights and collaborate during small group discussions at the Wildfire Safety Symposium.

Community Outreach

We're committed to keeping our island home safe and resilient. Together with our partners from public safety agencies and local community organizations, we're connecting with communities, listening to concerns, gathering input, collecting emergency contact information, and sharing wildfire safety prevention and preparedness information and resources.

In 2024, we participated in more than 100 in-person and virtual public outreach events. In the next three years, we plan to build on and expand these partnerships to host community events, reach individual residents, and share resources.

Wildfire Safety Working Group

Comprised of representatives from a diverse array of organizations and sectors, the working group was created to support the development of the Wildfire Safety Strategy, as well as inform and engage stakeholders on various aspects of our strategy, and afford stakeholders and partners opportunities to provide their knowledge, feedback and input. In the next three years, we plan to continue convening meetings to bring experts together and share best practices.

"Our 2025-2027 expanded Wildfire Safety Strategy builds upon our past work and that of many others. It is not just a technical roadmap, it is our shared and steadfast commitment to a safer, more resilient Hawai'i… Through collective action and thoughtful approaches, Hawai'i can create a fire-safe environment for generations to come."

– Shelee Kimura, President and CEO