

Loss Control

Wildfire Mitigation



In recent years, wildfires have become more frequent and severe, prompting growing concern among our members about the associated risks, and driving a mandate to effectively mitigate electric system-initiated wildfires.

The rise in wildfires can be attributed to various factors, notably climate change, alterations in land use, and human actions. Climate change, characterized by warmer and drier conditions, has made forests and other vegetation more vulnerable to fire. Meanwhile, shifts in land use patterns, driven by urbanization and agricultural practices, have removed natural fire barriers and amplified ignition risks. While, human activities have caused the greatest uptick in wildfires with studies showing that more than 80% are caused by activities such as campfires, smoking, fireworks, and sparks from vehicles, railroads and power lines.

Technological advances are enhancing mitigation strategies that can be used by electric utility providers to reduce the risk of wildfires. These strategies include:

- System hardening and resiliency measures such as:
 - Covered conductors
 - Overhead to underground conversion
 - Avian protection
 - Structure replacement
- Operational practices: Modify circuit breaker and recloser protection to minimize fault energy and reduce the risk of utility-caused ignitions during fire season.
- Public Safety Power Shutoff (PSPS): Pre-emptive power shut off in areas of heightened wildfire threat and mitigate the risk of electric system-caused wildfire ignition through planned de-energizations (PSPS events) during periods of extreme fire risk.

- Early detection and rapid response (Situational Awareness): Using technology, such as fire cameras, real-time weather monitoring and satellite imagery to detect fires early and respond quickly to contain them.
- Exposure analysis: impact and assessment of utility equipment installations.
- Increased inspection: Ignition prevention inspections and maintenance focused on within fire threat zones.
- Enhanced vegetation management: Reduce fuels, enhance clearing, and use LiDAR and hyperspectral imagery to monitor vegetation density and proximity to conductors.

With wildfires becoming more widespread, it's important to note that a history of wildfire in a particular area, or lack thereof, is not necessarily an accurate indicator of future risk. Utilities should model risk on more than just historical wildfire events and should collaborate with neighboring utilities, regulators, and county and state Fire and Department of Natural Resources agencies to leverage the knowledge and approaches that work best for their region.

AEGIS Loss Control provides our members support to help keep their systems operating safely, protect their workers and the public, and mitigate loss from wildfires, including risk assessments for both Property and Casualty, as well as Casualty Focused Services that specifically address wildfire. For more details and a deeper dive into wildfire mitigation, check out our most [recent presentation](#) on this topic, as well as additional loss control resources such as technical white papers and information on our [Loss Control services](#) on AEGISlink.

This document is advisory in nature and is offered as a resource to be used together with your professional insurance and loss control advisors in maintaining a loss prevention program. It is intended only as an overview, and is not intended as a definitive statement of the law in any jurisdiction or a substitute for consultation with your insurance broker, or for legal, engineering or other professional advice of any kind. This document is provided without any warranties of any kind and no liability is assumed by reason of the information contained herein.

Associated Electric & Gas Insurance Services Limited ("AEGIS") is a Bermuda insurer and eligible surplus lines insurer in the United States with additional qualifications in other jurisdictions. AEGIS's operations are conducted through a wholly-owned subsidiary, AEGIS Insurance Services, Inc. ("AISI"), which provides AEGIS and its affiliates with professional staff and services. This document is the property of AISI and should not be altered or modified in any way without the prior written consent of AISI.