

Power Lines & Wildfires: Reduce the risk

Summary: Utilities seek solutions for overhead distribution circuit caused wild fires

- As utility leaders respond to the threat of wildfires especially in arid, remote areas greater attention is being paid to the wildfire risk posed by bare wire distribution circuits.
- **Prevention is critical** Hendrix Overhead Solutions is playing a significant role in helping utilities replace bare wire **with a covered wire system** that may reduce risk and result in protection of life, property and the environment.

Legacy Bare Wire Hazards

- Line Slap Arcing and Sparks in high winds.
- Ground fire ignition from a simple spark even when current is absent.
- Fault-Induced Conductor Slap when a fault at one location creates enough magnetic force to cause line-to-line contact 1.0+ mile away.
- Vehicle contact with Power Poles causing downed lines
- Mylar balloon-related ignition, which caused 942 outages for California utilities in (2016) and 456 outages in (2017) plus an unknown number of fires.
- Animal-to-conductor contact. Including birds, squirrels, raptors, and others.
- Vegetation and tree limb contact induced arching and sparking.

Covered Conductor Advantages

Covered conductors – a key component of Hendrix Aerial Cable Systems – offer these advantages.

- **Momentary Contact.** Reduced fire risks from Day One through the life of the system.
- **Mechanical superiority.** In Hendrix Aerial Cable Systems, covered conductors are protected and supported by a high strength grounded messenger cable.
- **Reduced footprint.** Translates to reduced right of way, and environmental compatibility.
- Near-underground reliability at overhead cost. Lower labor, planning, and equipment costs.
- Environmental sustainability. Friendlier to wildlife and habitat. Plus reduced tree trimming.
- California Regulation GO-95 compatible.











Hendrix Aerial Cable Systems (ACS): A closer look

- ACS design: 3 covered conductors supported by a grounded messenger cable that protects conductors from vegetation. With covered conductors.
- **Space efficient:** The footprint of a 15kV, 3 phase system is less than 24" in height and 17" in width. Benefit: Less tree trimming and easy installation in tight spaces. (GO-95 36-3/4 x 3-1/4)
- Conductors are separated by spacers that keep the cables positioned along the length of the span. ACS covered conductors do not result in flames or sparks when contact is made due to wind, or with vegetation.
- **Covered conductor:** Substantial reduction in phase to phase or phase to ground contact momentary outages.

The Hendrix advantage: Complete system support

• Because of our longstanding work in this area, Hendrix can provide everything required to put a solution in place: Pre-design walk down, design or design review, materials, installation field support and pole by pole final inspection.

Fire Retardant Insulators

A fire retardant rated polymer will ignite if the temperature exceeds its ignition point. However, a Flame Retardant (FR) material will selfextinguish after the heat source is removed.

Although no specific flammability standard exists for insulators, the most commonly referenced industry standards for FR rated materials are all equivalent: UL-94, ASTM D3801 and IEC60695.

Hendrix (FR) insulators are tested according to UL 94. The material passes vertical burning V-O, which is the most stringent rating for UL 94.

Only you (and Hendrix) can reduce the risk of wildfires.

Review an ACS Case Study. Or talk to a Hendrix ACS expert today.

The statements made herein do not create any guarantees or warranties of performance. Any and all statements regarding the products performance are dependent upon proper installation and maintenance.





