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Elimination of Power line fault wildfires

I, John Peard, have been associated for the last 40 years with Lockheed Martin, specifically the main program I worked on was the NAVYâ€™s Trident Nuclear Missile Program. Obviously, safety of operating and maintaining these strategic weapons is of upmost concern. No amount of money or concentration is refused in the effort to keep civilization and property in the elimination of accidents. And as a result, over 120 test firings over the last 25 years there has not been one failed test flight.
I in my time at LM, have worked in the ground test department, primarily in the loads and dynamics test and analysis field, and was a Certified Senior Dynamic Test Conductor. I worked often with the safety engineers, planning and performing tests to insure safe flight tests. No stone was ever left unturned.

In reviewing the agendas of the upcoming Test Summits and reading about other programs being funded to eliminate the destruction of power line caused wildfires, I do not see the focus of prevention. What I see is the attempt to mitigate their damage. Sensors and drones are being developed to locate a wildfire once one has ignited. Vegetation clearing is being studied to provide some reduction in fires propagating at the expense of massive environmental damage and expense. There are even studies being funded to study what to do with the vegetation waste, money spent that has no direct connection to the immediate problem at hand.
At best, if a sensor or drone identifies a vegetation ignition at an instant, one can calculate the distance a fire will spread before responders are at the scene. Assuming a 30 mile an hour wind speed (the most likely cause of the fallen tree which ignited the fire) in 15 minutes the fire could spread 7 miles. It is obvious to me none of these projects even remotely address prevention.
A device to extinguish the damaged power line sparking must be present at the scene. Like the ubiquitous fire water sprinkler, it must eliminate the danger before it even has a chance to become a danger. There is no other physical method to not just reduce but potentially eliminate the risk.
We hope you take a look at our device and realize as we have deploying it in the risk areas is the only way that these events can be neutralized. It is a dynamic problem where the violent shaking of a tree falling on the lines, or just plain old degradation of a pole and itâ€™s inability to withstand high winds. Just as a carâ€™s seat belt restraint device locks the seat belt in the occurrence of a collision within milliseconds, so fast that your body doesnâ€™t travel even inches, our device can provide the same speed of reaction and de-electrify a power line before if can hit the ground.
I think that is what we are all striving for.

Additional submitted attachment is included below.

Mastery Instruments

Power Line Emergency Interrupter

Severs downed powerlines preventing arcing to nearby vegetation

Low Cost

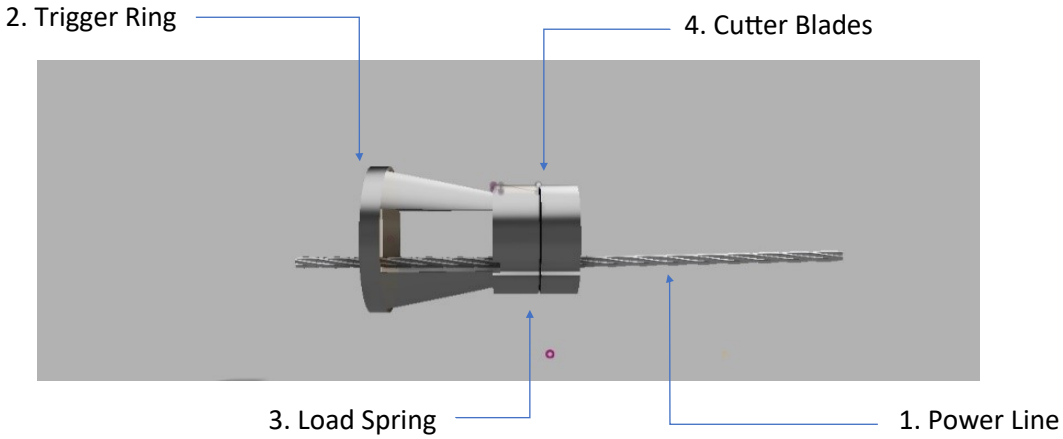
Easily Installed

Device maintains service to upstream customers

Reduces vegetation removal requirements

Millisecond Response

As seen in the recent California Napa area forest fires, fallen power lines continue to flow power and create sparks from the free end of the power line. Numerous deaths are attributed to victims coming in contact with power lines that have severed and fall to the ground. In addition, power is lost to the entire local grid area when the substation circuit breakers are activated to stop the flow of power through the fallen power lines. Loss of trees due to vegetation clearing around power poles and lines is expensive and harmful to the environment.



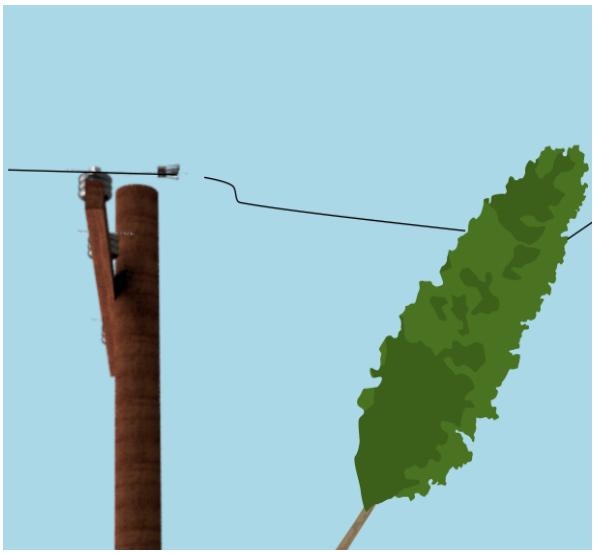
Description - This device would sense a separation of a power line, or a downed power pole by the acute angle the power line would make from its normal straight-line projection to the adjacent power pole. The internal cutter would sever the downed power line at the nearest undamaged power pole. The severed line attached to an undamaged pole could still function.

Operation - Device slips onto existing Power Line (1) near power pole insulator. Locking screws clamp device to power line. When a line breaks or a power pole is downed, the power line comes in contact with the Trigger Ring (2). This forces the trigger ring (2) to shift, causing a locking device to release. Upon release the load spring (3) causes the two cutter rings to rotate which engages the cutter blades (4) to sever the power line.

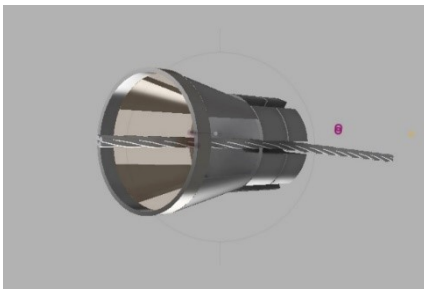
Millisecond Response

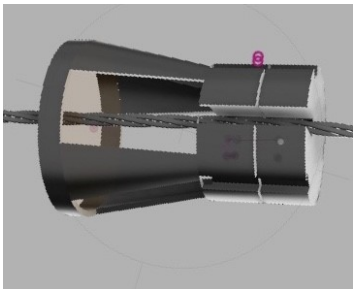
An object falling on a powerline will deflect the line, causing the Interrupter to trigger, releasing a cutter blade, which severs the powerline before it impacts the ground.

Therefore only an unenergized powerline impacts nearby objects, including dry vegetation or bystanders. The device effectively halts the possibility of fires or electrocutions in the vicinity



Easily installed—Device slips onto powered line with no power interruption





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