

UTILITIES LOSE TENS OF MILLIONS
OF DOLLARS A YEAR TO COPPER THEFT.

IT'S TIME TO TAKE THE POWER BACK.

**PROOF
POSITIVE**[®]
Trace ID Codes Prove It's Yours



Southwire[®]

INTRODUCING PROOF POSITIVE®: COPPER WIRE THAT HELPS YOU CATCH THE BAD GUYS RED-HANDED.

An estimated 95 percent of utilities have been hit by copper theft in recent years. If yours hasn't, you're lucky: A 2008 industry survey of 618 U.S. utility companies revealed more than 18,400 incidents in one year alone among that sample group. People looking for quick cash are lured by a booming scrap metal market, the ease at which copper can be accessed and stolen, and the fact that such crime has historically yielded few convictions and relatively light sentences. In other words, in the eyes of the perpetrator, copper theft is a low-risk, high-reward endeavor.

But for the affected utility — and the tax-paying public — the consequences of copper theft are immeasurable. Cut wires and tampered equipment pose a tremendous safety hazard: according to industry estimates, one person is injured each week and three people die each month as a result of these incidents. Additionally, power outages that stem from copper theft can cause a range of downstream safety risks, from disabled traffic lights and pedestrian signals to disruption of critical equipment at the local hospital.

In terms of infrastructure damage, the cost of replacing copper wire is nothing compared to the expense of fixing vandalized substations, transformers, utility poles, fencing, and other equipment. The loss of a few feet of stolen wire is a mere fraction of the total repair bill — not to mention the lost revenue from resulting power outages. According to the 2008 study, copper theft costs the U.S. power industry an estimated \$60+ million annually. Taxpayers shoulder much of this burden in rate increases.

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456,210

Estimated minutes of power outage experienced by U.S. utilities each year as a result of copper theft.



In 2011, the Salt River Project, one of Arizona's largest utilities, lost an estimated \$5 million due to copper theft. The loss represents 5 percent of a 3.9 percent rate increase imposed in 2012.



WON'T LEGISLATION HELP?

The issue of copper theft has the ears of lawmakers nationwide. Most states have enacted legislation, or have bills pending, to mitigate the problem by regulating scrap metal sales and criminalizing the sale of stolen copper. In 2013, a bill was introduced in Congress to make copper theft a federal crime. But while these efforts have some merit, they are not airtight solutions.

For one thing, a creative thief can find ways to forge IDs and other information to pose as a legitimate seller. Moreover, most of the legislation puts a heavy burden on scrap yards and recyclers, who may be required to hold onto loads of material during a waiting period before the product can be sold. These facility owners are the utility's best partners in prosecuting criminals.

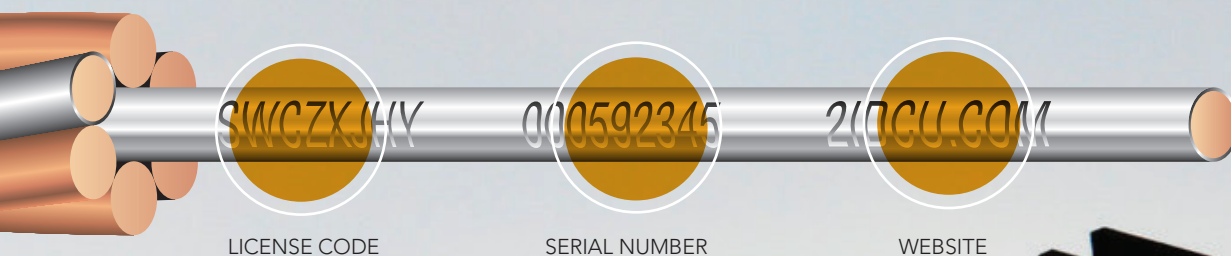
An April 2013 story by NPR noted one pain point that legislation is trying to address: that is, how to best track and trace stolen copper. One police chief interviewed in the story ruminated that copper isn't like a television or car "...where there's a serial number or ...VIN number and can easily be traced."

POLICE NEED PHYSICAL PROOF OF OWNERSHIP TO ARREST AND PROSECUTE CRIMINALS. NOW, WHEN YOUR UTILITY PARTNERS WITH SOUTHWIRE COMPANY, THEY'LL HAVE IT.

INTRODUCING PROOF POSITIVE® PRODUCTS

Proof Positive® products, available in both copper & copper-clad steel, are the only traceable copper theft solution on the market. Made from utility-grade copper, the product looks and behaves like any other copper conductor except for a unique feature: each foot of cable is imprinted with TracelD™ codes that provide an unique “fingerprint” for proving ownership.

These TracelD codes are entered on a secure, online database that is available to all users, from law enforcement to recyclers, 24 hours a day, 7 days a week. The database is updated in real time and provides current, accurate ownership data of each foot of cable.








HERE'S HOW OUR PATENTED SOLUTION WORKS:

- Proof Positive wire is readily identifiable by a tin-coated strand that is “candy striped” into the product. The center strand contains TracelD codes consisting of unique license codes and serial numbers. On the solid (single-strand) products, the entirety of the conductor is tinned, and the TracelD codes are etched along the length of the conductor.
- As the wire is sold, the dealer enters the codes into an online database accessible to recyclers and law enforcement. These codes document your utility as the rightful owner of the product. The process is quick and done for every subsequent re-sale. No additional equipment is needed to read the ID codes.
- The tinned outer and center strands distinguish Proof Positive from other stranded copper and copper-clad wiring. The solid (single-strand) products are completely tin-coated. This alerts recyclers (and any would-be thieves who are in the know) that this is traceable material. If the recycler encounters someone trying to sell the product, he or she can run a quick database check at www.2IDCU.com to verify that the person attempting to sell the copper is truly the rightful owner
- The database displays the chain of ownership for the length of wire in question, all in real time. The recycler doesn't have to endure the hassles of holding product during a waiting period. Law enforcement can take appropriate action without delay.
- Over time, as potential thieves become aware that copper wire can be traced, they'll move on and leave your infrastructure intact.

PROVEN QUALITY FROM SOUTHWIRE

Our Proof Positive® family of products are manufactured with state of the art equipment and strict adherence to rigid quality controls at every step. The product installs just like traditional cable and is rated to perform to spec when used under normal operating conditions.

COMPARE PROOF POSITIVE® CABLES TO OTHER DETERRENT PRODUCTS

METHOD	WEAKNESSES
 SPRAY PAINTING	No true proof of ownership; anyone can spray paint the wire
 MICRODOTS	<p>Only visible with a UV light and magnifying glass; difficult for the recycler to detect, and not a deterrent to criminals</p> <p>Wiring may only be marked in a single area, so it can easily be overlooked</p> <p>Must be registered by the end user to enable tracing; may still be registered to the previous owner</p> <p>May be removed through burning or long-term exposure</p>
 COPPER-CLAD STEEL	Looks like solid copper, so it's not a theft-deterrent. Once cut, the damage is done
 CAMERAS/MOTION DETECTION	<p>Too dependent on proper camera position, resolution, lighting and other subtleties</p> <p>High initial cost and diminished lifetime when used in substations</p> <p>Not necessarily a theft deterrent; can be damaged or covered up by perpetrators</p> <p>Impractical for monitoring utility poles</p>
 FENCING	<p>Expensive</p> <p>Can be damaged to get to the wire, leaving operations exposed and causing additional repairs</p> <p>Doesn't prevent access to utility poles; impractical for large geographic areas</p>

Source: Interviews with Schnitzer Steel Security Team, 2013

PROOF POSITIVE® IN ACTION: A TALE OF TWO UTILITIES

Thinking “traceable wire” sounds like a gimmick? It’s not. Just ask two of the largest utility companies in the Southeast.

Georgia Power



As part of our process for testing our Proof Positive® cable prototype, Southwire asked Georgia Power to install a sample of Proof Positive® Copper in a theft-prone substation just outside metropolitan Atlanta. After we demonstrated the prototype product and web-based tracking system to recycling companies in the area, Georgia Power installed several ground wire samples of the 4/0-7 Proof Positive Copper in March 2009.

Only one week into the test, all of the new grounding conductor had been cut out. Two weeks later, on two separate occasions, individuals tried to sell the stolen copper to a recycler. Because the copper could be positively traced to Georgia Power by the recycler on the spot, law enforcement was able to successfully apprehend three people in conjunction with the substation vandalism and theft.

The power of Proof Positive cable was reinforced again to Georgia Power in 2011. The utility has a close relationship with Schnitzer Steel; the two companies share information to help combat copper theft in the Atlanta area. So when a couple of people showed up at a Schnitzer scrap yard with 44 pounds of copper wire to sell, the scale operator immediately identified the distinct tinned outer strand of the material as traceable Proof Positive wire. The scale operator immediately called Schnitzer security. Police arrived at the scrap yard within minutes and detained both suspects. The positive identification provided by Proof Positive’s TracelD™ codes established the proof of ownership police needed to arrest the suspects and charge them with theft by receiving, a felony crime.

Georgia Transmission Corporation

GTC builds and maintains high-voltage systems for 39 of the Georgia’s 42 electric co-ops, which means it has responsibility for overseeing more than 3,000 miles of transmission lines and over 600 substations. So in October 2010, after thieves stole standard copper grounding wire from GTC’s Hagen Creek substation, the company decided to use 4/0-19 Proof Positive Copper for the repair.

One week later, the same substation was hit again — only this time the thieves weren’t aware they had taken a new kind of traceable copper.

Deputies responding to the alarm at the substation chased two suspects into the woods, and with a little help from their K-9 unit, successfully sniffed out and arrested the suspects, who had 40 feet of Proof Positive Copper in their vehicle.

Using the serial number on the recovered wire, GTC’s lead investigator was able to prove ownership of the stolen copper. The defendants were both charged with felony criminal damage to property, theft by taking and criminal trespass.



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TraceID™ Codes Prove It's Yours

PUT AN END TO THE
POWER STRUGGLE
ONCE AND FOR ALL.

Contact Southwire today to learn more about how Proof Positive® can help you **End Copper Theft™**. Protect your utility, safeguard the community you serve, and create powerful alliances with local recyclers and law enforcement.

It's easy: we've cracked the code.

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