Almost everyone in the electric cooperative movement knows that our nation faces “an epidemic of copper theft.” Bandits, desperate to cash in on sky-high prices for the ductile metal, have damaged distribution systems across the United States, stealing copper from substations, storage yards, and even live wire off utility poles.

Collectively, these illicit activities force co-ops to spend tens of millions annually in replacement materials and repairs. But electric co-ops are fighting back—at local, state, and national levels. They have forged coalitions with others affected by the problem, reached out to scrap dealers and recyclers that unintentionally provide a market for stolen goods, embraced new approaches to safeguarding supplies, mounted public education campaigns, and successfully lobbied for stronger antitheft statutes in a majority of states.

“The biggest battles are being waged locally, where traditional community connections serve electric cooperatives well,” comments Richard G. Johnstone Jr., executive vice president of the Virginia, Maryland & Delaware Association of Electric Cooperatives in Glen Allen, Va. “As a result, electric co-ops and statewide associations are assuming prominent leadership roles in developing solutions.”

Through consumer education and legislative efforts coupled with improved security, electric co-ops are taking steps to stem the tide of metal theft.
At Wood County Electric, Eaton points to two incidents where crooks actually swiped primary line at great risk to themselves. “They caused about a three-hour power outage each time.”

When final expenses are factored in, copper theft usually ends up costing a co-op about 10 times the value of the pilfered metal. “Theft increases power costs to the consumer, leaves dangerous conditions behind for lineworkers and the public, and affects our service reliability,” Eaton purports.

Through the task force, the co-ops have conducted a publicity drive that includes billboards, newspaper advertising, and a “media day” to encourage consumers to keep an eye out for suspicious behavior.

**Cooperation among cooperatives**

In Texas, four electric cooperatives that lost $4.3 million combined to copper crime have joined forces with an investor-owned utility and insurance company to form the East Texas Copper Theft Task Force.

“The idea is that we can work together to share best practices, resources, and try to aggressively reduce copper theft,” explains Paige Eaton, communications director for Wood County Electric Cooperative, located in Quitman, Texas. Other members include Farmers Electric Cooperative, based in Greenville; Rusk County Electric Cooperative, with main offices in Henderson; Upshur-Rural Electric Cooperative, headquartered in Gilmer, as well as investor-owned utility Southwestern Electric Power Company, a subsidiary of American Electric Power, and Insurance Network of America.

Wendy Regan, Farmers Electric risk management supervisor, notes: “We’ve had several substations broken into, which not only resulted in the grounds missing but a couple of regulators burning up. Thieves have removed grounds from the perimeter of substation fences as well. In one case, someone hooked a four-wheel drive vehicle to some pole grounds to pull them free.”

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Through the task force, the co-ops have conducted a publicity drive that includes billboards, newspaper advertising, and a “media day” to encourage consumers to be on the lookout for thieves. In addition, coordination with local law enforcement and scrapyards has increased the level of cooperation between all parties.

The efforts are having an impact. “We had an instance of a dealer reporting someone who brought in stolen metal,” Eaton mentions. “And one of our members took down the license plate and vehicle information of someone he saw out at a line.”

In Georgia, Flint Energies, headquartered in Reynolds, and Central Georgia Electric Membership Corporation, based in Jackson, take part in a diverse group known as the Macon-Middle Georgia Metal Theft Com-
mittee. The co-ops’ statewide service association, Georgia Electric Membership Corporation, based in Tucker, also participates.

Although some in the utility industry have criticized salvage dealers for their willingness to accept items of dubious origin, the Peach State committee was launched by Chip Koplin, co-owner of Macon Iron & Paper Stock Co., Inc., a metal recycler, who became alarmed after a rash of copper thefts from vacant homes in the city of Macon.

“If somebody was to break into one of our facilities tonight, I would automatically send an e-mail to Macon Iron & Paper Stock, which then notifies all committee members, including other recyclers, as well law enforcement,” remarks Billy Patterson, Flint Energies manager of procurement & facilities. “Everybody gets immediate notice that something has been stolen, and they’re on alert.”

The setup has led to prosecutions and significantly dented the problem. “In December 2006, when things were at their worst, Macon logged 84 incidences of metal theft,” Patterson adds. “In March 2007, that total fell to 21, and by last October it was down to eight.”

Koplin credits electric co-ops with getting the word out. “They’ve really taken the ball and run with it. They’ve played a big role.”

On another front, Georgia EMC has worked to combat the growing problem by bringing together local prosecutors, sheriffs, chiefs of police, county commissioners, mayors, and scrap metal dealers. The statewide has hosted metal theft stakeholder meetings where utilities, recyclers, and others share successful strategies and identify additional steps—that should be taken.

That teamwork has carried over to the Georgia legislature—recyclers and power suppliers have worked together to strengthen the state’s metal theft law. Nationwide, at least 29 states have passed measures to tackle the issue over the past few years, according to a tally by the National Conference of State Legislatures (NCSL; see map).

“Most of the bills increase penalties for such theft [usually by making it a felony] and improve record-keeping requirements for recyclers,” stresses Kate Marks, NCSL energy program director.

While the first pieces of legislation focused exclusively on copper, most are now all-inclusive as metallic merchandise like beer kegs and automobile catalytic converters have become popular targets for thieves. John Seabrook, writing in *The New Yorker*, compiled a list of frequently purloined objects that includes bronze grave markers, manhole covers, aluminum bleachers, guardrails, streetlight poles, storm drain grates, and nozzles on fire hoses. In Elk River, Minn., a 7-foot bronze statue of Buddha was taken from an outdoor temple shrine.

**The price is right**

Driving the crime wave are record-setting world metal prices, fed by breakneck economic growth in China, India, and the Middle East. In early July, copper was selling for nearly four times what it did just five years ago, trading above $4 per pound before falling below $2.50 this fall. Since 2003, aluminum tripled from roughly 50 cents to $1.50 per pound (presently selling at close to $1 per pound); zinc soared from under 50 cents to $2 per pound, before collapsing to approximately 70 cents per

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**Slowing the ‘Red Gold Rush’**

With copper and non-ferrous metal larceny costing the nation $1 billion per year, NRECA has partnered with the Coalition Against Copper Theft—which includes several business groups—on congressional legislation that would give police additional tools to combat the scourge. The bill, H.R. 6831, would set minimum federal standards for tracing shady deals, such as requiring scrap dealers to show government identification and making all transactions payable by check.

NRECA has also joined the National Sheriffs’ Association and aluminum, copper, paper, plastics, textiles, and beer manufacturers in a task force assembled by the Washington, D.C.-based Institute of Scrap Recycling Industries (ISRI).

“ISRI is creating an e-mail-based system to notify dealers to watch for reported stolen materials” explains John Holt, NRECA manager of generation & fuel. “Utilities would contact the system, which sends alerts to recyclers and police within a 200-mile radius.”
pound; lead climbed from 25 cents to $1.75 per pound (now around 70 cents per pound); and nickel skyrocketed from $5 to $25 per pound (now in the neighborhood of $6 per pound). But co-ops believe much of the trouble can be connected to a serious social ill.

“Why would anyone with a rational mind break into an energized substation, where they’re most likely going to seriously injure themselves, just to pull off $50 worth of copper?”

The illegal drug connection has given law enforcement agencies added incentive to work closely with electric co-ops in making metal theft a felony. “It gives police another way to move against clandestine meth labs,” Verner indicates.

An ounce of prevention

Of course, copper theft from electric grids remains the biggest concern because of the inherent dangers. Although no official compilation exists, media reports put the number of would-be burglars who have died trying to steal copper from power lines or substations at two dozen or more over the past two years. Kentucky, alone, has recorded five fatalities since 2006. One of those came when a man tried to cut down a primary feeder on Jackson Energy Cooperative’s system earlier this year.

“It was an old copper line de-energized up to a point,” confirms Carol Wright, vice president of engineering & operations for the McKee, Ky., distribution co-op. “He stole several de-energized spans and came to the pole where it was energized again. He was using a ladder to reach the line and physically touched it while trying to cut it down.”

Jackson Energy has experienced serious difficulties with thieves cutting down line in remote areas—$109,000 so far this year. Changes being implemented may help trim that figure.

“We’re replacing our copper lines with ACSR [aluminum-conductor, steel-reinforced] and our grounds with steel-core versions,” Wright says. “We’re also offering a $2,500 reward for information leading to the arrest of metal thieves and have worked hard to educate our members to keep an eye out for suspicious behavior.”

South River Electric Membership Corporation, based in Dunn, N.C., which faced a rash of break-ins at equipment facilities, has changed its operational practices and now stores all copper indoors at night. “It creates a bit more work at the beginning and end of each day, but it’s made a real difference,” relates Catherine O’Dell, South River EMC manager of member relations & public affairs.

Hoosier Energy, a generation and transmission co-op headquartered in Bloomington, Ind., installed surveillance cameras at various locations. “Metal theft costs us about $100,000 a year,” estimates Alan Woodford, Hoosier Energy power delivery coordinator. “We did catch one guy on camera, and he was arrested. In addition, if we’re doing new construction, we station guards. We keep someone at the site 24-7.”

Hoosier Energy also offers a $2,500 reward for information leading to the arrest of anyone stealing from or vandalizing power delivery facilities.

Some electric co-ops are exploring high-tech options. Wood County Electric has started using a futuristic nanotechnology called “DataDot.” Transparent, sand-grain sized dots are etched with a special identification number and then sprayed on materials. The dots are revealed under a black light where the number can be read with a special scope, allowing everything to be tracked.

Wood County Electric has publicized DataDot through press events and member education. In turn, theft attempts have declined.

“I believe it’s acting as we intended,” concludes Eaton. “Our goal is not to suffer any losses to begin with.”

Combatting Copper Crime

(States, shown in green, with laws regulating scrap metal sales or explicitly criminalizing the theft of copper and non-ferrous materials)