(U//FOUO) Copper Thefts Disrupting Homeland Infrastructure

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(U) Prepared by the Office of Intelligence and Analysis (I&A), Cyber, Infrastructure, and Science Division, Strategic Infrastructure Threat Branch and the Office of Infrastructure Protection, Infrastructure Analysis and Strategy Division, Risk Integration and Analysis Branch. Coordinated with the Office of Infrastructure Protection, Partnership and Outreach Division, the Department of Energy (DOE), and the FBI.

(U) Scope

(U//FOUO) This Note identifies resources that may assist the Department and other federal, state, local, tribal, and private sector partners in developing priorities for protective and support measures regarding terrorist or other potential threats to homeland security by informing those entities about trends in copper thefts, including their perpetrators, targets and impact. It also describes the mechanisms for reporting copper thefts, the procedures for recovering stolen metals, and suggested protective measures.

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(U) Key Findings

(U//FOUO) Reported copper thefts from critical infrastructure and key resource (CIKR) sectors in the United States rose at least 50 percent in 2010 compared to the previous year, largely driven by record-high prices for copper.

(U//FOUO) Individuals and criminal organizations have engaged in copper thefts primarily for financial gain. We have seen no indication that terrorists are using copper thefts in the homeland as a tactic to damage or destroy CIKR facilities or to fund terrorist activity.

(U//FOUO) Suggested protective measures and avoidance techniques include increasing awareness, training and security, working with local authorities and scrap dealers, and using alternatives to copper metal.

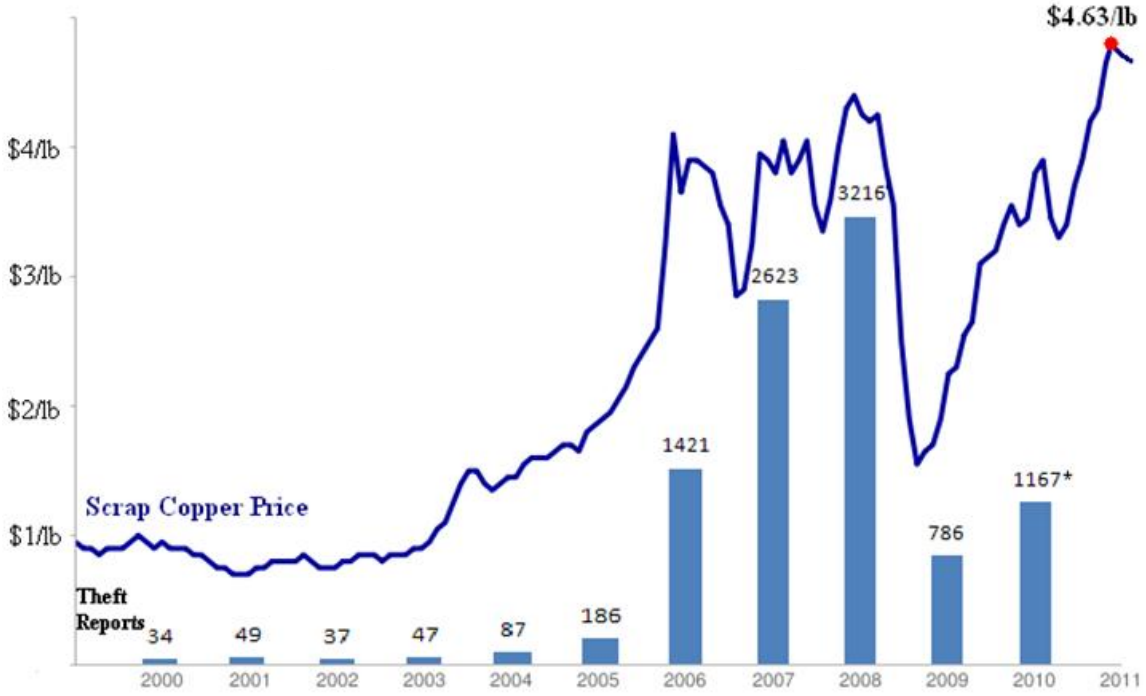
(U) Source Summary Statement

(U//FOUO) This Note is derived from DHS, DOE, Transportation Security Administration, and open source reporting. Sources provide accurate and credible accounts that provide high confidence in analytic judgments. Some information is slightly dated and may not include all details of an incident as the investigation and trial were not complete at the source's date of publication. Comprehensive and current data on copper thefts are unavailable due to lack of reporting of every theft, especially small thefts and thefts in remote areas.

(U//FOUO) Threat to Homeland Infrastructure Operations

(U//FOUO) Scrap copper prices remain well above historic levels, reaching an all-time high of $4.63 per pound in mid-February 2011, primarily due to growing demand from developing countries. The upward trend in thefts of copper components from CIKR sectors generally tracks increases in copper prices (see Figure 1). Theft levels in 2011 are likely to exceed 2010 levels, but mitigation efforts by states and the private sector probably mean they will not reach the record levels seen in 2008.

(U) Figure 1. Scrap copper prices and reported thefts.



(U) Note. Indicates theft report data for September–December 2010 is a conservative estimate based upon January–August 2010 theft reports.

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(U) Targeting

(U//FOUO) The most lucrative and highly targeted CIKR sectors are the energy, transportation, commercial facilities, communications, agriculture and food, dams, and water sectors. Criminal elements are drawn to these sectors because of the large amount of copper components they use and the lack of security measures to inhibit theft. Other targets include schools, religious institutions, and vacant homes.

— (U//FOUO) Thieves mostly target remote sites where they are unlikely to be seen or require special access. These include construction sites, foreclosed homes, irrigation pumps, and power lines.

(U) Thefts

(U//FOUO) Law enforcement agencies have noted that some illicit drug users fund their habits by stealing copper. Other perpetrators include current and former industry employees with insider knowledge or individuals who use deceptive techniques, such as posing as employees, to gain access to restricted areas.

— (U) In March 2011, a security guard at the Port of Houston was arrested for allowing his friends and family access to the port, where they allegedly stole over 22,000 pounds of copper transiting the facility.

— (U//FOUO) In October 2008, thieves in Florida posed as utility workers—using vehicles painted with utility-service logos and wearing utility company uniforms—to access manholes to steal copper from underneath city streets. They stole copper cables worth over $1 million before being arrested.

(U) Impact

(U//FOUO) The theft of copper can disrupt electricity and communications and impede the response time of emergency services. Copper theft also can cause significant property damage. The cost to replace stolen components can be considerably greater than the value of the stolen copper parts themselves. According to a 2007 DOE estimate, US electrical utilities spend almost $1 billion per year on repairs and to fix disruptions caused by copper wire theft.

— (U) From January 2011 to June 2011, thieves in northern California knocked down 300 power poles to steal copper wiring from within and on the poles.

— (U) In February 2011, five separate thefts of copper from telephone cables in southwest Virginia disrupted phone service to over 1,000 residents for up to a day.

— (U//FOUO) In December 2010, over 4,000 Louisiana homes and businesses lost power after a copper theft at an electricity substation created a system overload, forcing the system to shut down.

— (U//FOUO) In November 2010, a series of copper thefts from radio transmission towers near Houston, Texas prevented emergency-service dispatchers from communicating with firefighters and paramedics for nearly an hour.

(U) Theft Reporting Databases

(U) Metal theft databases offer a tool for law enforcement, CIKR owners and operators, and scrap dealers to share information.

— (U) The Institute of Scrap Recycling Industries (ISRI)[USPER] trade association launched a Web site (www.ScrapTheftAlert.com) for victims and law enforcement to report copper thefts. The ISRI Web site covers multiple precious metals, not just copper. To verify the legitimacy of scrap copper before purchase, scrap-metal dealers can search for thefts that have occurred in their area. Scrap-metal dealers can also subscribe to automatically receive reports of thefts that have occurred within a 100-mile radius.

— (U) The Metal Theft Investigation System (MTIS) database (www.leadsonline.com/main/metal-theft) tracks copper and other metal thefts. Scrap dealers can access MTIS to input information about sellers of scrap copper, including driver's license number and photo; vehicle make, model, and license plate; type of metal sold; and resale price. Law enforcement can search MTIS using identifying markings found on metals to track down stolen metals that were resold.

(U) Protective Measures

(U) We recommend the following actions to secure CIKR assets and facilities from copper theft.

- (U//FOUO) **Alert customers.** Ensure customers are aware the theft of copper can cause disruptions to their electrical service, encourage customers to report copper thefts to the local authorities, and provide news releases to the media on the dangers of copper theft.

- (U//FOUO) **Train staff.** Provide employee awareness training on the dangers of copper theft and identify preventive steps employees can take, such as securing spare copper materials at distribution facilities, switch yards, and substations. Establish and train employees on proper inventory control and methods for timely identification of copper thefts.

- (U//FOUO) **Heighten security.** Where appropriate, use physical security measures—such as fences, gates, lights, and locks—to deter theft. Install alarms and video surveillance to detect theft. Conduct post-event analysis to identify security gaps. Post signs indicating the premises are being monitored, and physically respond to intrusions.

- (U//FOUO) **Work with local authorities.** Establish close relationships with local law enforcement and identify CIKR assets for protection. Coordinate search and recovery activities with local law enforcement authorities. Work closely with fire and emergency medical teams and local hospitals to ensure timely response to life-threatening situations created by copper thefts.

- (U//FOUO) **Interact with local scrap dealers.** Build positive relationships and establish awareness programs with local scrap dealers. Notify scrap dealers of thefts and request their help in identifying and locating stolen materials.

- (U//FOUO) **Use alternative materials.** A potential avoidance technique is to replace the copper with high-temperature superconducting (HTS) power cable. HTS cable is used for electric transmission and distribution and could be a viable alternative to traditional copper cable.

(U) Outlook

(U//FOUO) Copper thefts are likely to persist as long as scrap copper prices remain high. Federal, state, local, and tribal law enforcement; private sector owners and operators of CIKR; and scrap metal dealers should promptly report thefts via appropriate metal-theft databases and use protective measures to reduce the risk of theft.

(U) Reporting Notice:

(U) DHS and the FBI encourage recipients of this document to report information concerning suspicious or criminal activity to the nearest State and Major Urban Area Fusion Center and to the local FBI Joint Terrorism Task Force. State and Major Urban Area Fusion Center contact information can be found online at http://www.dhs.gov/contact-fusion-centers. The FBI regional telephone numbers can be found online at http://www.fbi.gov/contact/fo/fo.htm and the DHS National Operations Center (NOC) can be reached by telephone at 202-282-9685 or by e-mail at NOC.Fusion@dhs.gov. For information affecting the private sector and critical infrastructure, contact the National Infrastructure Coordinating Center (NICC), a sub-element of the NOC. The NICC can be reached by telephone at 202-282-9201 or by e-mail at NICC@dhs.gov. When available, each report submitted should include the date, time, location, type of activity, number of people and type of equipment used for the activity, the name of the submitting company or organization, and a designated point of contact.

(U) I&A would like to invite you to participate in a brief customer feedback survey regarding this product. Your feedback is extremely important to our efforts to improve the quality and impact of our products on your mission. Please click below to access the form and then follow a few simple steps to complete and submit your response. Thank you.

Survey

(U) Tracked by: HSEC-4.1, HSEC-4.2, HSEC-4.9, HSEC-4.10

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Homeland Security

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