

Power Theft

The Silent Crime

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In 1981, FBI Special Agents armed with Federal search warrants raided several east coast buildings in search of evidence of gambling. During the raid, these Agents discovered an unusual condition—the electrical power in one of the buildings had been intentionally bypassed.

The theft of energy is an economic crime that adversely affects all utility customers. Utilities estimate that 0.5 to 1.0 percent of all customers steal from them¹ and that their annual losses exceed \$1.7 billion in electricity and \$1.3 billion in natural gas.²

New Orleans Public Service, Inc., was one of the first utilities to recognize its power theft problem and to develop a program to combat it.³ In 1971, the first year of the program, the company

provided information to law enforcement authorities that led to 27 arrests and 25 convictions. About 10 years later, the annual figures reached 453 arrests and 447 convictions. Among those caught stealing that year were a prominent lawyer, an electrical engineer, a State legislator, and a high school principal. The company estimates that two-tenths of a percent of its customers currently steal power and that without an aggressive deterrent program, 10 to 15 percent would steal.

Consolidated Edison (New York) investigated 88,942 cases of suspected power theft and caught 12,000 customers stealing \$7 million worth of electricity and gas in a single year.⁴ Potomac Electric Power Company (Washington, DC, area) discovered

2,800 cases in 1 year and recovered nearly \$800,000 from guilty customers.⁵

Energy thieves do not restrict themselves to major utility systems of metropolitan areas. Rural electric cooperatives and smaller municipal systems also report losses to thieves. In a national survey, a group of rural cooperatives reported that they suspected more than 2 percent of their members of stealing power.⁶

Residential customers are responsible for about 80 percent of all detected thefts, while commercial and industrial users account for the remaining 20 percent. However, commercial and industrial users account for an estimated 80 percent of all dollar losses. Usually, thefts by industrial users exceed \$100,000, and in several cases,



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utilities estimated losses of almost \$1 million.

When a customer steals from the utility, the company absorbs the loss into its rate structure, making honest customers pay for it. Theft of services costs each customer in the United States about \$30 per year in additional utility expenses.⁷

Committing the Crime

There are more ways to steal power than most utilities care to admit. Some techniques are very simple, but effective, while others are sophisticated and difficult to detect. The utilities, for obvious reasons, dislike publicizing the methods used to steal power. Although we understand their concerns, we have two reasons for deciding to discuss some of the more common methods used. First, law enforcement may find it difficult to detect and investigate a crime without knowing the *modus operandi* (M.O.) used to commit it. Second, consumers already can acquire this information in a number of different "How To" pamphlets currently available through the mail.⁸

Three of the most common methods used for stealing power include inverting the meter, placing straps behind the meter, or switching meters. Inverting most meters (turning the meter upside down) will cause the meter to run backwards, which actually takes watt hours off the reading. Remarkably, some customers get so greedy that they reverse too many hours off their meters. Thus, they show a net loss from one meter reading to the next.

Placing jumpers or metal straps behind the meter is an effective, though dangerous, way to steal electricity. If done correctly, some of the electricity

will flow through the straps and the remainder will continue to register on the meter. Unfortunately, some of the thieves attempting to use this method have electrocuted themselves. Others have created dangerous conditions that have resulted in fires.

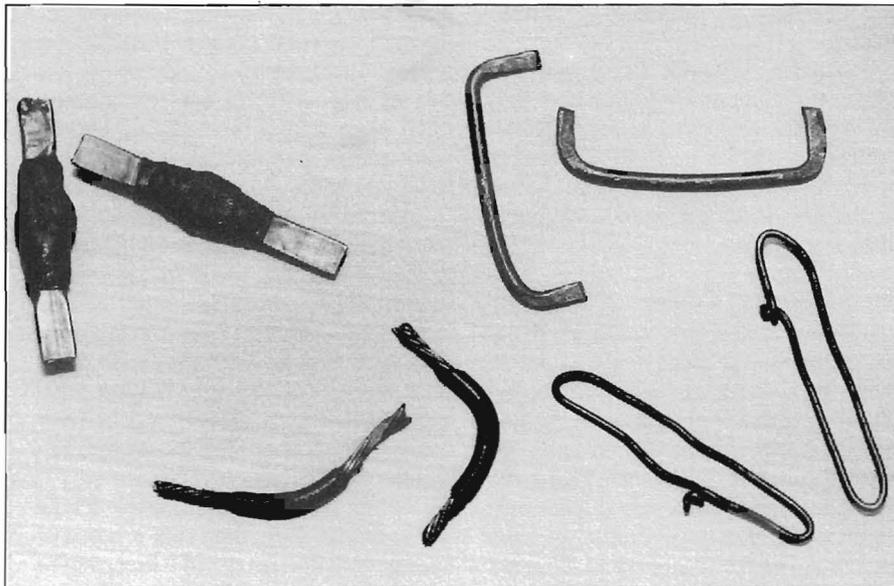
Some enterprising thieves steal an extra meter and place the spare meter in their socket for 10 to 15 days each month. Then, before the meter reader is scheduled to read their meter again, they put the meter provided by the utility back in the socket. Meter readers usually catch these people when they make random checks of the meters between meter reading cycles.

Other offenders drill or shoot a hole in the meter. They then use a piece of wire or coat hanger to put a drag on the wheel. They remove the wire and cover the hole with duct cement and a splash of paint before the meter reader returns.

Sophisticated power thieves either use elaborate bypass systems or tamper with internal mechanisms of the meter. Usually, they will install a bypass system at the weatherhead where the entrance cable attaches to the house and then runs to the other side of the meter. By placing a switch on the bypass, customers can decide when they want electricity to run through the meter and when they want it to run through the bypass.

Customers tampering with the internal mechanisms of the meter can simply bend the wheel to create a drag, or they can tamper with the meter's polarity to accomplish a similar objective. They also can modify registration of electricity by placing resistors in the meter.

“Power theft affects all consumers because it results in increased rates.”



An assortment of various metal items used for jumping electrical meter sockets.

Combating the Problem

The first step in combating the power theft problem is for utilities to develop and maintain system integrity. Law enforcement agencies should encourage utilities to seal *all* meters and then inspect the seals regularly.⁹ For this program to be effective, utilities must securely maintain the seals. Some utilities use plastic seals with serial numbers and require employees to sign for them by number. Others have lead seals and use crimping devices with distinctive patterns to close those seals. The utility will know that someone has tampered with the seal if they find the wrong serial number or crimping pattern on a seal at a customer's house.

Some older homes have meters located in basements or back rooms where the utility company cannot read-

ily access them. Many companies move these meters to outside areas where they can visually inspect the meter when it is read. In areas where power theft has become a major problem, utilities can place these meters on utility poles high enough to be beyond the reach of the customer, but still easily readable by meter readers.

Utilities that closely monitor the amount of electricity used by customers can often detect a theft without looking at the meter. They can accomplish this task by having their data processing department conduct a comparison analysis of a current month's usage with the same month of the previous year. If they detect a decrease of more than 33 percent, they should inspect the metering system at that account.¹⁰

Law enforcement agencies should encourage utility firms in their areas to

monitor all disconnected accounts, especially if they disconnected a consumer for nonpayment. Utility personnel should drive past the house at night several days after the utility has disconnected the service. If they see lights, they may then suspect that the customer is stealing. If a police officer sees electricity being used where it has been legally disconnected, he or she is witnessing either the theft of electricity or the receipt of stolen property, depending on the applicable legal statutes in his or her jurisdiction.

Investigating the Crime

Some utility systems have developed an in-house capability by using former police officers to detect and investigate power thieves. Most utilities, however, rely on their local law enforcement agency to assist them with the investigation and prosecution.

Utilities often initiate probable cause investigations after a meter reader detects a broken seal or other indications of tampering. The meter reader reports the condition to a supervisor or power theft investigator, who then conducts the investigation. At this point, some utilities will contact their local law enforcement agency, and an officer will accompany the utility investigator during the initial investigation.

If the investigator finds evidence of tampering, the area around the meter is treated like any other crime scene.¹¹ The investigator often prepares reports, takes photographs, and collects evidence. The handling and eventual disposition of the photographs and evidence will depend on any agreements between the law enforcement agency and the utility.

If the primary objective of the utility's power theft program is revenue recovery, the utility will collect and maintain the evidence. The law enforcement officer's role, in this case, is

that of a witness to what was found at the scene. If the investigation results in prosecution or litigation, the utility will call the officer as a material witness. In these cases, the customer usually decides to reimburse the utility for the loss to avoid court proceedings.

In jurisdictions where the utility and the police agency have decided to prosecute power thieves, the officer at the scene of the initial investigation usually will collect the photographs and evidence. The utility investigator serves as a material witness. In these cases, the utilities want to try to prove the customer's guilt. They hope the judge will require guilty customers to make restitution to the utility as part of the sentence.

A number of utility systems conduct their own investigation, and when warranted, take certain cases to their local police department. Other systems avoid criminal prosecution entirely. They prefer to use the civil judicial system, when needed, to deal with their power theft problems.

Prosecuting Power Thieves

Law enforcement agencies are not always aware of the extent of power theft and its economic impact, because when a utility catches a thief, it prefers to give the customer the opportunity to pay for the amount of electricity stolen to avoid criminal prosecution. This often is an effective approach when dealing with first-time offenders. On the other hand, dealing with repeat offenders necessitates criminal investigation and prosecution to combat the problem.¹²

Many States have laws that make meter tampering and power theft crimes punishable by a combination of a fine, imprisonment, or civil restitution.¹³ Most power theft cases are investigated and prosecuted under two general sets of statutes. Meter tampering laws deal only with evidence indicating that someone tampered with the meter or metering system.¹⁴ Investigation under these statutes tries to establish that the meter was tampered with and that the consumer charged with the crime did the tampering. Since

An example of one utility thief's method for slowing down an electric meter by using a screw driver inserted through a predrilled hole in the meter glass.



“ . . . the theft of utility services costs the United States over \$3 billion every year ”

it seldom is easy to prove who was responsible, some State statutes include a prima facie provision that assigns the presumption of guilt to the person(s) who benefited from the tampering.

The other set of statutes addresses the total power theft problem, including the dollar loss suffered by the utility.¹⁵ These statutes apply when someone has tampered with the meter system and actually stolen electricity or other utility services. Again, some State statutes include an assumptive provision that assigns responsibility for the tampering and theft to the person(s) who benefited as a result of the action.

Some States provide for awarding treble damages if a utility wins a suit against a thief. For example, if a customer stole \$1,000 in services, the court could award the utility \$3,000 in damages.

Before a utility can file charges against a potential suspect, it should gather the following as evidence, documents, and appropriate statements:

Witnesses—These include the meter reader who initially detected the possible diversion, the utility investigator, and the police officer who conducted the investigation.

Tampering devices—These could include straps behind the meter, wires used in a bypass system, or other tampering devices or equipment relevant to the case.

Meter report—This would show that the meter was operating correctly when installed and demonstrate how the particular tampering method used would have affected the metering of electricity. Most utilities have laboratories where the meters can be

tested and technicians who will provide the necessary testimony in court.

Account billing history—This would illustrate the time the theft began and the amount and cost of the stolen electricity. Most utilities have the ability to review each account's consumption and billing records on a month-by-month basis to provide this information.

Some utilities prefer to use civil litigation when they have questions such as: Did meter tampering or power theft occur? How much electricity was not metered as a result of this tampering/theft? Was the defendant responsible for the electricity used at this location? In a civil process, the utility does not accuse anyone of stealing. They simply state that the meter did not operate correctly and that the defendant is responsible for the electricity used at the location where the loss occurred.

Problems in Prosecution

In many States, a conviction for meter tampering or power theft can be based solely on a utility being able to demonstrate motive, opportunity, and that the accused benefited as a result of the tampering, regardless of who actually did it. Utilities establish motive through the customer's billing records and the cost of the diverted power. They demonstrate that the accused had opportunity and benefited from the diversion by showing that the accused lived in the residence or owned the business where the theft occurred.

States having statutes that include the presumptive clause assume that the person "who benefited as a result of the tampering" is criminally respon-

sible. The prima facie clause has been challenged in a number of States.¹⁶ Some States have upheld the clause in the face of challenges, while others have ruled it unconstitutional. As a result, many utilities have decided to avoid criminal prosecution when the question of who actually tampered with the meter becomes an important point.

Another problem in the criminal prosecution of utility theft arises in some State statutes that require the prosecution to prove the defendant intended to injure or defraud the utility.¹⁷ This can make prosecution difficult. For example, a customer moves into a vacant house or apartment where no service is connected and then jumps the socket to get power. Did this customer intend to call the utility, report the action, and pay for the electricity used, or did he intend to steal?

Recent Cases

The New York State Supreme Court recently affirmed a conviction of theft of services by a corporation based on evidence of a damaged electrical meter that recorded a substantially reduced power consumption.¹⁸ The court concluded that since only the corporation's employees had access to the room housing the damaged meter, there was sufficient evidence for a conviction.

The Sixth Circuit of the U.S. Court of Appeals held in a Tennessee case that electrical service is a property right and cannot be discontinued to a customer without prior notice or a pre-termination hearing.¹⁹ Even though a city found that its meter had been removed and replaced by another one,

the court held that the customer had sufficient due process rights to prevent termination of electrical service without notice.

An investigation into the literature also found two cases in which electrical power diversion resulted in the loss of professional employee status. A board of education in Alaska dismissed a tenured school teacher after his conviction for diverting electricity. The Alaska Supreme Court upheld the board's decision to dismiss the teacher based on their finding that the act constituted a crime of moral turpitude.²⁰ Another case involved the disbarment of an attorney convicted of theft of services by meter tampering or receiving unmetered electrical service, as well as attempted criminal possession of a weapon.²¹

Courts hearing appeals on utility power service thefts generally found the terminology describing this offense to be clear (i.e., not unconstitutionally vague). A Louisiana Supreme Court case found no problems in the terms "diverting," "preventing," and "interfering," which described how utility service was obtained by a defendant.²² The Supreme Court of Delaware also upheld that their State's theft of services statute also was not unconstitutionally vague.²³

Summary

The economic crimes of meter tampering and power theft have grown to alarming proportions in many parts of the world. Power theft affects all consumers because it results in increased rates.

A coordinated effort between utilities and law enforcement agencies can

help to combat this problem. Utilities have the responsibility to assess the extent of the crime in their service area and to establish methods and procedures for identifying thieves. They must also determine what their objectives will be once they detect potential thefts. Some utilities conduct all of their investigations and followup actions, while other systems call upon their local law enforcement agency to assist them in investigations.

Since many utilities do not have personnel with the experience or qualifications necessary to conduct a criminal investigation, the potential role of the police agency becomes very important. If utilities elect to conduct their own investigations, they will still need advice, assistance, and training from their local police agency. If they decide to work with the agency to combat the problem, they must establish procedures for the coordinated effort.

Though the theft of utility services costs the United States over \$3 billion every year, by working together utilities and police agencies can combat this crime and help control the future cost of energy to the consumers in our country.

FBI

Footnotes

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- ³"Utilities Say 1 Percent of Users are Stealing Power," *The New York Times*, March 26, 1984.
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- ⁵"PEPCO Adds Investigators, Catches Many More Thieves," *The Washington Post*, February 6, 1981.
- ⁶1982 *National Energy Theft Survey* (Boston: New England Power Service, July 2, 1982).
- ⁷Supra note 5.
- ⁸J. J. Williams, *Iron Gonads* (Alamogordo: Consumertronics Company, 1970).
- ⁹K. A. Seger, "Systems Approach Limits Power Theft," *TVPPA News*, November-December 1982, pp. 10-13.
- ¹⁰Supra note 1.
- ¹¹Supra note 9.
- ¹²J. J. Gray, ed., "Theft of Utility Services," *Criminal and Civil Investigation Handbook* (New York: McGraw Hill Book Company, 1981), p. 7-126-8.
- ¹³*Ala. Code* §13-2-80 et seq.; *Alaska Stat.* §42.20.030; *Ariz. Rev. Stat.* §13-1601; *Cal. Penal Code* §499a; *D.C. Code* §22-3115; *Fla. Stat. Ann.* §812.14; *Ga. Code* §26-1507; *Haw. Rev. Stat.* §708-825 et seq.; *Idaho Code* §18-4621 et seq.; *Ill. Rev. Stat.* tit. 111 2/3 §381.382; *Kan. Crim. Code* §17-1921; *La. Rev. Stat.* §14.67.6; *Ohio Rev. Code Ann.* §4933.19; *Pa. Stat. Ann.* tit. 18 §3926(e); *Tn. Code Ann.* (TCA) §39-3-938; and *Utah Code Ann.* §76-6-409(1)(a) and (1)(b); paper presented by S. R. Grubbs, "Legal Remedies for Theft of Electricity," American Power Association Legal Seminar, November 12, 1980.
- ¹⁴See, for example, Virginia §18.2-163, *Tampering with Metering Device; Diverting Service*. The Virginia statute does include a prima facie provision.
- ¹⁵See, for example, Tennessee §39-3-938, *Diversion of Electric Power - Presumption of Intent to Defraud - Civil Action by Utility*. The Tennessee statute does include a provision whereby the utility can recover triple damages.
- ¹⁶Paper presented by M. Banks, *Current Diversion Training Manual*, University of Florida and the Southeastern Metermen's Association, March 1979.
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- ¹⁸*People v. San Roc Restaurants, Inc.*, 498 N.Y.S. 2d 481 (1986).
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- ²⁰*Kenai Peninsula Borough Board of Education v. Brown*, 691 P.2d 1034 (Alaska 1984).
- ²¹*Richard DeCesare v. Departmental Disciplinary Committee*, 443 N.Y.S. 2d 375, 82 A.D. 2d 716 (1981).
- ²²*State v. McCoy*, 395 So. 2d 319 (La. 1980).
- ²³*Wright v. State*, 405 A.2d 685 (Del. Supr. 1979).