REVENUE PROTECTION:
Combating Utility Theft & Fraud

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Introduction

Energy theft in the United States costs consumers billions of dollars each year. This reflects billions of dollars that are built into their utilities' rates bases and paid for by honest consumers. In other countries, energy theft may result in losses that exceed 50% of the energy generated. In a world where energy is a critical commodity, the need to combat energy theft should be a goal and even an obligation for every utility.

As a Chief Financial Officer for a utility commented, developing a revenue recovery program is like finding change that has been lost in the pillows of a couch. It is money the utility let slip out of its pockets and that it needs to recover.

The emphasis of this book is on developing a structured revenue protection program where the goals are to identify and recover revenues lost to energy thieves and customer fraud. An effective program will also help to identify revenues lost to metering problems and billing errors. These losses almost always exceed losses resulting from theft and fraud.

Larger utilities should have a full-time staff dedicated to revenue protection and recovery. Smaller utilities will assign these duties to personnel in other positions who put on their revenue protection investigator hats when a potential theft is discovered. In both cases, the primary objective of the program is to recover lost revenues and to convince first offenders not to attempt to steal utility services in the future.

An effective revenue protection program will decrease losses resulting from theft and fraud and help the utility recover revenues already lost. It will add dollars to the utility's revenue stream and help to deliver services to consumers at a reasonable price.

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Revenue Protection: An Overview of the Challenge

Case Studies

His method was simple. He attached a jumper to his overhead electrical service, taped it on, and a portion of the load bypassed the meter. It was simple and it worked. He started stealing electricity during World War II for the three apartments and the small wood shop that he owned. He wasn't caught until February 2001 when the now 91-year-old customer called to complain about an outage. The utility found the jumpers when responding to the complaint. The statute of limitations limits the utility to charging the customer with only seven years of stealing and he has been back billed $82,000. If he could be billed for the entire time, at today's rates his bill would be $655,999. It's bad enough that the customer was stealing for at least 56 years, but it's even worse that the utility never detected the potential theft during that period.

In the 1990s a utility on the east coast of the United States decided to randomly check the meters at grocery stores. They were looking for metering problems but also found meter tampering. At the Primo Grocery Store they found the owner began stealing electricity three months after he opened the store. Before he was caught he had stolen $30,000 worth of services. In a plea bargain the utility agreed to bill him $20,000 for the lost services. Similarly, at the Fairway Market the utility found the owner had stolen more than $140,000 in electric services. He faced a sentence of up to 10 years in prison and a $100,000 fine.

Recommended Actions

- Review your utility's policies regarding revenue protection utility, back billing, and related procedures. You should also review pertinent statutes and laws. These should be reviewed with an attorney. Policies will be further discussed in chapter 2 and a sample policy is found in Appendix B.
- If you have a revenue protection program in place, are you identifying commercial and industrial theft? If you are in a rural area, are you looking for agricultural theft? Residential theft is the easiest to find, but the real dollars are lost to commercial and industrial accounts.
- Review the cases you have already discovered and look for patterns. Have you found several cases using similar methods in the same neighborhood? If so, check all the meters in the neighborhood. Have you identified several members of the same family? Check all the family members you can identify. If you found a business stealing, did you check the meter at the owner's house? If you found the owner stealing at home, did you check the business?
- Who reads your commercial and industrial meters? If you are using meter readers, then consider forming a separate unit of meter personnel—in a small utility a meter person—to read those meters. You're not just looking for diversion or tampering, you're also looking for maintenance and other problems that are costing you money. Commercial and industrial accounts pay the utility's bills. Monitor them carefully.
- If you are the electric utility—and gas, cable, and water are separate—when you find an energy theft, suggest to the other utilities that they check their services at the location. Do not tell them you caught the customer stealing. Just suggest they check the services. Ask them to do the same for you.
- Consider inviting the local police to brief your field employees on the marijuana and methamphetamine problems in your area. Ask them to show these employees what to look for in the field that may be an indicator of these illegal operations. Let employees know who to contact when they find a suspicious situation or location.

Reading meters at inactive accounts

We have discussed the need to read meters of inactive accounts monthly. The utility needs to ensure that the account is still inactive and that the meter is still there. The meter should be removed from an account that remains inactive for some time.

There should also be a program in place to read meters of accounts that have been disconnected due to nonpayment and are not reconnected within five business days. Accounts that are disconnected for nonpayment who self-reconnect make up the greatest percentage of revenue protection investigations in most utilities. If energy theft is suspected, inspect the account after dark to determine if lights are on. If so, you may consider visiting the account with a police officer. Show the officer the work order disconnecting the service, as well as evidence that the service has been reconnected illegally, and that who ever is using the service is receiving stolen property. Now it's time to knock on the door. Let the officer do the talking. The customer will not always be arrested. Often the situation is resolved by disconnecting the service again and requiring the customer to come to the utility the next day to pay the bill and arrange for the service to be reconnected, legally.

Reactive Activities

So much for proactive activities. A suspect situation has been found and now is the time for reactive activities. The fourth component of the program is about to spring into action.

Possible theft detected

Either a customer has telephoned a tip that someone is stealing or an employee found an irregular meter situation. It's now time to mobilize the investigative team. This may be a team of one if the investigator is a meter technician. If not, the team will include the investigator and a technician. A police officer may also be called, depending on the utility's policies and working relationship with local law enforcement.

Opinion evidence (expert testimony)

Unlike someone presenting direct evidence or testimony, when an expert witness takes the stand, the attorney who called the witness first establishes the credentials and asks the court that the witness be considered an expert in this particular field. Credentials are established by reviewing the person's résumé and experience as they relate to the case. The attorney for the other side has the right to question the witness further before the judge makes a decision. Once qualified as an expert witness, the person can present opinions. In our scenario, the investigator would be qualified as an expert witness. When asked why the wires were stripped at the other end, the investigator could render an opinion that there was probably an on and off switch on the inside of the house allowing the customer to control when the meter was registering the electricity used.

Documentary evidence

Documentary evidence includes the customer's application for service and billing records. It also includes the investigative report and photos of the crime scene.

Scientific evidence

This includes fingerprints, DNA samples, and the like. Scientific evidence is usually not used in utility theft cases. The closest we come to this is the testing of the meter, but the meter test report is usually presented as documentary evidence. The rules of evidence require that physical evidence must be identified and properly collected at the crime scene. The evidence should be fully described in the investigator's field notes, including any identification numbers. Describe how the evidence was found, its relationship to the case and note how it was photographed. Photograph the evidence as found. In our example, the investigator would have photographed the wires going through the back of the meter base before and after they had been removed. A smart investigator would have also placed the wires on the ground next to a ruler and taken a photograph that shows their exact length.

Once the evidence is identified, photographed, and collected, it should be tagged and bagged at the scene. The investigator should use the same

include promotions, bonus, or influence and are usually the consequence of employee fraud. When an organization commits fraud, the benefits and gains are usually direct in the form of financial gain.

The motivation for fraud is often explained using the *fraud triangle*. As shown in figure 4–1, the three elements of the triangle are opportunity, pressure, and rationalization. To decrease fraud losses, the utility must understand which of these elements it can influence.

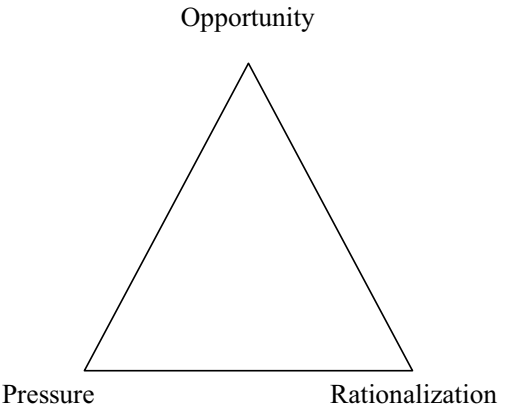

Fig. 4–1. The fraud triangle

The utility has some control over opportunity. It can be more effective in checking the customer's identification before connecting service. It can monitor problem accounts. And when a customer is disconnected for non-payment, the utility should be more suspicious when a so-called new customer applies for service at that location, often on the same day. The utility should remove as much of the opportunity to commit fraud as possible.

The utility also has some control over the pressure element. Very few industries work as well with customers who are experiencing financial problems as the utility industry. If a customer has an honest reason for not being able to pay the bill, such as illness in the family, many utilities will arrange a payment plan for the past due amount. Not only will the utility make payment arrangements, but it will counsel the customer on how to use less of its product. Not many industries have similar policies.

The utility has little control over the rationalization element. The rationalization may be that the customer needs to reduce the bill so that

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The Paper Chase and Revenue Recovery

Sources of Information

The *paper chase* in many revenue protection investigations is limited to the use of utility records. You check the name on the service, consumption and billing records, and the possibility of previous irregularities associated with this customer and/or this location. Occasionally you will have to check with a landlord to determine who is actually renting the property or look up tax records to find out who owns the property. When you are conducting a major investigation, there are a number of additional sources of information that can assist you in conducting the paper chase. Remember the old saying, "no job is completed until the paper work is done."

The investigator's greatest asset is knowledge of sources. The true investigator knows where to go to find the information needed to complete the investigation. A lot of this information is available within the utility, some of it is available from public sources, and occasionally you will need information that is purchased from private sources such as credit bureaus. An experienced investigator will have additional sources of information that are developed over time including Internet resources and individuals with expertise in various areas. There are four general categories of information that you may need to access during the paper chase: government, business, legal and safety, and the Internet. Each of these is discussed separately in the sections that follow.