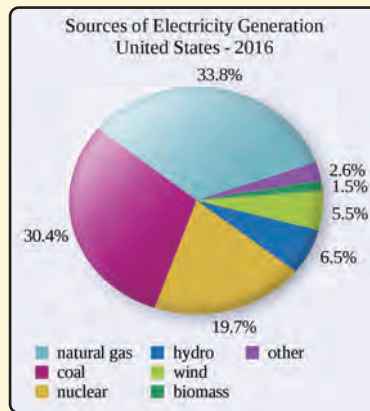


INTERNATIONAL UTILITIES REVENUE PROTECTION ASSOCIATION

I U R P P A
INC.

Volume 28 Issue 2

Fall 2018



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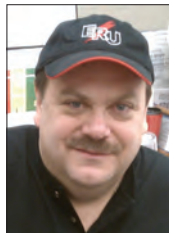
From the Chairperson

Revenue Protection Here to Stay

As we move forward the utility business continues to change and for the first time ever we are vulnerable to people and organizations who want to get some or all of our customer base away from us. Let's face it in the past some of us had to fend off take overs from other utilities or even votes where cities maybe wanted to form a PUD; but really these threats weren't that serious in the overall picture. Now with technology changes and companies wanting to find ways to get in between the utility and its customers, I think it's a great opportunity for Revenue Protection to step up and show our utilities how important it is to protect what you have and to account for every penny as well as the impact we can have on safety.

It's why I am so passionate about IURPA and all the regional conferences as well as our international friends. We have to support each other, provide training, we need to bench mark to be able to share data. We should help other revenue protection groups continue or to start new ones. This kind of support comes from conferences and contacts that can support you in almost any situation you encounter.

Paying dues and registrations keeps these organizations afloat and keeps us strong throughout all



Steve Sprague
IURPA Chairperson

Developing relationships with Law Enforcement, code enforcement and other departments within your utility is critical. No revenue protection group can do it alone.

changes and challenges. Getting involved helps ensure that we are strong going forward and also brings new ideas and energy to the groups. Our vendors also play a key role at conferences and utility visits to see you with new and improved ideas and products. I guess this is me reaching out to all of you to say please get involved somehow and you can do it by the things I mentioned above. We have plans for the future that include partnering with WSUTA in 2019 and then in 2020 IURPA will for the 1st time ever look to host a conference of our own to celebrate 30 years in the industry. We hope that you would start planning now for two conferences. Attend your own regional conference but also plan on joining us in 2020 for what is sure to be a memorable experience as we celebrate our 30th year.

Back to the business at hand, how to make an impact in the new world and utility changes and new directions. If you have a department or are starting one you need to show value by tracking revenue recovered as well as avoided losses as a result of your work. You need to stress the safer environment all employees enjoy because of what we do in the field.

Theft is changing and for some of us who have migrated to the new meters, we have (often times) experienced less meter tampering; but it's being replaced with much more damaging and unsafe theft. As customers move to bypass our meters they can steal more and be harder to detect at the same time. These kinds of bypasses create very dangerous situations for all our employees.

Developing relationships with Law Enforcement, code enforcement and other departments within your utility is critical. No revenue protection group can do it alone. We need everyone pitching in to report theft situations and suspicious behavior and places. If law enforcement calls for help, go and help because who knows when you may need their support.

I have spoken of this before but it's important to share successes upstairs to your Managers and Officers, get stories submitted to the IURPA newsletter or attend a conference and share your story or experience. If you are in a position that you can serve on a board or be a trainer please step up; we

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need you. Share the newsletters around at your business and reach out to other utilities when it makes sense, I know at my utility I have given leads to neighboring utilities, went and trained other utilities, and even in some cases helped them to start programs. Remember we are stronger when we stand together.

IURPA is currently looking at other ways to network or to get the word out to other parts of the utility business. Often times at these conferences or gatherings they are discussing things like credit, customer service or smart grids. That is a great opportunity to spread our base by showing these other groups how revenue protection fits in with these other groups. You may be at one of these other conferences and they ask “what is revenue protection” or “why do you need one” That’s your opportunity to share, educate and recruit for one of our conferences.

I know that many of you are good at residential or single phase theft and losses but what about commercial loss? Do you realize that one commercial theft or miss-wire could make your numbers for the entire month? Just yesterday 9/14/18 my utility, Portland General Electric, identified a theft on a large commercial building. Early estimates suggest that we may have lost in excess of \$300,000 at one location. We are early in the investigation but what if this company has done this before and we have hundreds of these situations out there? A tip I will share with you that was key in this case is to look for customer owned meters that might be measuring energy

for some of their customers or equipment. If you have a meter room with multiple meters and you see a sub meter do you take the time to verify everything is OK or do you just change the meter you were there for and leave? I know from now on what we will do is take the time to make sure all energy is running through the utility meter.

The best way to be successful with commercial theft and loss is to start an audit program so that the metermen or employees that go to the site are there to be thorough and look at everything. In today’s world sometimes we get busy or we trust the new meters and we shouldn’t. Also, put the right people in the right spots much like auditing must have someone who knows their job and also has a reputation for being thorough and persistent.

In closing we are all part of this special family in Revenue Protection. Once we get in it’s hard to leave because we usually never want to leave. Continue to do the good work you do; revenue recovery, safety and making other employee’s feel like they have someone who is there for them on the tough or unsafe jobs. I’m proud to be one of you and hope that you will take the time to go to the website for IURPA and please become a member, remember there is strength in numbers and a friend just an e-mail or phone call away.

Steve Sprague
IURPA Chairman
Portland General Electric
Revenue Protection Supervisor

Electricity Loss Reduction & Theft Management Summit 2018

York Hotel, Singapore, 2nd -5th July 2018

Mike Wilkinson, Vice Chair of the UKRPA attended the Electricity Loss Reduction & Theft Management Summit in Singapore in July.

Asia is a growing financial market with a need to ensure the populations of the countries have the basic needs of energy, which in the remote parts struggle to be serviced. The need to strengthen their systems and become more efficient are apparent. The non-technical losses are massive compared with the more developed countries around the world but the engagement and enthusiasm to alter this is top of their agenda.

Mike’s input was to share how the UKRPA inter-



Mike Wilkinson

acts with strategic partners either with the UK government or other partnerships to share the knowledge, experience, and drive to reduce energy theft.

He delivered a workshop on ‘Human Investment’. This was demonstrating how to train revenue protection teams on how to be efficient in the field and the need to

have a good knowledge base, and how to deliver a good model office in detecting energy theft.

The second part of the workshop was showing a structured approach on the mental health issues of our people. It is an ever-increasing cost to the business and a concern that needs the attention it deserves, ensuring mental health is at the forefront and ensuring the delivery of the support mechanism is in place with our companies to ensure issues that arise can be dealt with support given to our people.

Revenue Protection Investigators next step,

RETIREMENT?

Mike Szilvagy – 2000 IURPA
Chairperson



Mike Szilvagy

Believe it or not, retirement comes sooner than you think! As some may remember, my name is Michael Szilvagy and I retired from DTE Energy November 2006. I was also the Past Chairman of IURPA and Past President of META (Midwest Energy Theft Association). I had 38 years with the Company and worked as an Investigator in Corporate Security for 28 years. My exposure in this Department and Theft Conferences I attended gave me a broad knowledge of Utility Theft and Fraud in the following areas i.e., Electricity, Gas, Steam and Water. I also spent a couple of year's cross-training in the Auditing Department as a Fraud Investigator. This was also a great experience working with some very talented people within and outside of the Company.

So much for my background, some call me a "has been" now but my paycheck says I'm Retired???. Even after almost 12 years now, Energy Theft and Fraud have never left my head. Some people say there is "no cure"? Well, what does an Investigator do in "Retirement" you might ask? I will attempt to tell you how my investigative background worked for me. I would like to share with you the many paths I took and you may consider once you retire.

For me and my wife, we started building our dream retirement home in Tennessee before we retired. The first day of retirement we left the ice and snow storm of Michigan and started to take over the construction of our home on a direct basis. That turned out to be 12 to 14 hours a day job for a year. We were off the grid and focused on our house. While out of state for the first start of this construction we could see fraudulent invoices coming our way. Our direct involvement put this activity to an end saving us thousands of dollars.

From my past experience, I was able to secure a couple of consulting projects and provide my knowledge to other companies regarding theft. Although consulting wasn't my goal in retirement it was a great experience to provide my expertise to other utilities. Energy Theft never seems to leave one's mind after this many years in business.

I then served on our Community Homeowners Association as a Board member. Wow, did that ever get

my Fraud Investigator experience going again. At first, you listen and learn. Slowly I was able to find discrepancies in billing by the community Developer. Because a strange turn of events my two year term as a Director turned out to be four and one half years. My Utility experience proved useful as I was able to detect that our local Utility was providing low voltage to our three phase fountain water pumps causing our pumps to overheat and burn up prematurely. The water bills for the fountains were a thousand dollars a month and considered "normal" since that had been going on for ten years. I convinced the Board to hire a company that specialized in finding water leaks. They found a leak with a stethoscope type of instrument and fixed the broken pipe for four hundred dollars. The fountain water bill dropped to one hundred dollars a month. Serving my community is just another outlet for my Investigative mind.

Another issue I have discovered recently in the South is that some large businesses have extreme lighting ongoing inside and outside their facilities. I wonder how they can afford to stay open while only selling seasonal products. Somehow I would like to examine their utility usage. Maybe there is another story here?



In closing, I am enjoying my retirement and spend many hours restoring a 1951 Chevy pickup as a Retro-Mod for an added challenge. I have met many locals that are Hot Rodders too and are working on their own custom cars. Laurie and I also have had the opportunity to travel all over the world which has given us great pleasure. In addition, our home is a reunion site for family and friends. This includes the beautiful landscape of Tennessee with mountains and waterways. Retirement is FUN...even for an Investigator!

DTE Data Analytics for AMI

By Patrick Pelley - DTE Data Analyst

DTE is a southeastern Michigan based utility company that services about 3 million customers together with 1.5 million gas and electric meters. DTE started its AMI (Advanced Meter Infrastructure) program in 2006. DTE has nearly completed its AMI meter installation program. With the AMI implementation, a theft data analytics initiative was developed. The theft and collections department currently consists of 30 investigators. DTE theft analytics comprises two part-time analysts. The analysts perform the data consolidation, algorithm implementation, and reporting metrics. The main intent of this article is to briefly describe the analytic methods and some of the metrics with the initiative.

Theft leads come from a variety sources:

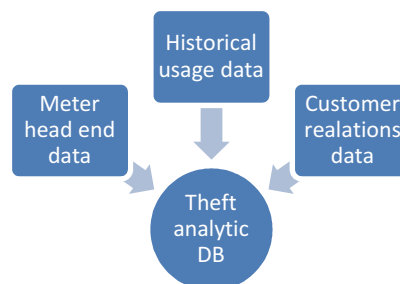
- AMI Theft analytics
- Customer calls
- ID-Fraud
- Thermal imaging
- Corporate complaints
- Theft prospecting
- External vendor analytics
- Electric field operations referrals
- Contractor referrals

Field service orders for each theft lead source is created either automatically or manually. Investigators will then perform an analysis of the meter and report back their findings via a mobile application.

While there are a number sources for theft leads as described above, the remainder of this article will focus on the AMI theft analytics source.

The Data

The diagram below shows some typical data sources used to build the theft analytic database. For illustration purposes this is a very basic data model. These data sources typically would be on different servers and databases. The data sources are combined into one database for processing. The sequence of processing is mainly done by workflow software. The final output of the workflow software is to make a file that can be used to batch create field service orders for field investigators.



Analytic Methods

The following table lists some of the analytic methods currently being used or will be implemented over time.

Method	Additional Details	Variables
Remote Disconnect, then tamper event with no corresponding service order.	This method will find customers that have had their power remotely disconnected and have subsequently tampered with their meter to get power and no corresponding service order.	<ul style="list-style-type: none"> • type of disconnect • type of tamper event • type of service order
Remote Disconnect and meter is not communicating.	This method will identify customers that have had their power remotely disconnected and now the meter is not communicating	<ul style="list-style-type: none"> • Type of disconnect • Non-communication length
Remote Disconnect and Load-side Voltage.	Customer's power has been remotely disconnected but we are still seeing voltage from the customer's load side indicating they still have power and are getting it from somewhere.	<ul style="list-style-type: none"> • Conditions persist TBD time • No customer of record • Proper account maintenance
Tamper event + no work order.	This method will find customers who have tampered with their meter and are possibly now bypassing their meter.	<ul style="list-style-type: none"> • Type of tamper event • Type of work order
Tamper event + no work order and reduced energy consumption.	This method will find customers who have tampered with their meter and are possibly now bypassing their meter.	<ul style="list-style-type: none"> • Type of tamper event • Type of work order • Periods > X with low usage • More than Y recurrences in Z days • Do outage & restoration flags frame the gaps?
Periodic reduced energy consumption.	This method identifies reduced energy consumption over a period of time. Various tampering methods can be used to reduce usage.	<ul style="list-style-type: none"> • Periods > X with low usage • More than Y recurrences in Z days • Do outage & restoration flags frame the gaps?
Gaps in communication profiled over time	This method will identify customers that are removing and	

	reinstalling their meter over the course of the month. Or the customer is bypassing meter and therefore no power to meter.	<ul style="list-style-type: none"> • More than X 0 usage in Y days • More than Z recurrences • Do outage & restoration flags frame the gaps?
Polyphase phase failures.	This method identifies meters where there is a phase failure and no associated phase restoration.	<ul style="list-style-type: none"> • What phase • More than z recurrences • Do outage & restoration flags frame the gaps?
Polyphase phase read failures	This method identifies meters where there is zero usage on one of the phases.	<ul style="list-style-type: none"> • What phase • More than z recurrences • Do outage & restoration flags frame the gaps?
External vendor	This method identifies customers where the gas usage has changed over time.	<ul style="list-style-type: none"> • Gas usage overtime

The Metrics

Detailed below are the metrics for the 4 methods implemented thus far.

Method	Metric	Theft Found
Remote Disconnect and meter is not communicating.	2016 field orders completed by investigators.	36%
Tamper event + no work order.	1033 field orders completed by investigators.	11%
Polyphase phase read failures.	138 theft leads. None sent to field.	NA
External vendor analytics	Avg. 5 per week.	NA

Lessons Learned

- Do your research and baseline. This will help gage how your initial plan or concept should compare to similar implementations. This will help communicate your expectations. What kind of results can you expect and are you tracking similarly?
- Keep a good tracking system. Make sure you can trace the analytic method to the field service orders to the results. How can you break the data apart for better analytics? For example, what meter tampering event performs better than the other i.e. Load-side voltage versus meter removal meter events.
- Make sure you get data back from the mobile apps the investigators use that can help improve the analytics.
- Utilize the investigators. Do a go and see.

- Don't implement/enhance during an enterprise wide project. For example, resources due to other project priorities could be at a minimum for the theft analytics initiative.
- Ensure the quality of your needed data is correct/mature. Utilize other groups findings to anticipate and countermeasure defects. For example, elements like the meter number and premise association need to be correct. Analytics is all about the quality of the data.
- Ensure you have a robust architecture. Depending on the analytic method, processing millions of records requires powerful systems. Having limited processing power will reduce the amount of data that can be processed. For example, certain algorithms can only process about 20% of total meters nightly because of a limited architecture. This is especially true if you plan to use small interval usage data and voltage data.

Smart meters provide data that was not available to Revenue Protection in the mechanical meter world. Analysis of this data helps get the right cases in the hands of field investigators and saves wasted field trips. This, in turn, can make the Revenue Protection organization even more valuable to the utility!

Resources

1. Consumers Energy
2. EPRI documents



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Dates: April 24th – 26th

Location: Portland Marriott at Sable Oaks – South Portland Maine

The NURPA Board is currently in negotiations with the Portland Marriott at Sable Oaks located in South Portland, Maine. The hotel is conveniently located close to the Portland International Jetport (PWM). Complementary shuttle service to the Hotel is available.

Announcements will be forthcoming and more detailed information will be posted on the web site as soon as it becomes available.

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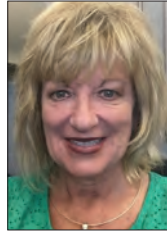
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The Power Struggle: Exploring Revenue Loss beyond the Meter

Every day, at utilities large and small, investigators fan out across their service territory in search of energy theft. Stolen or swapped meters, jumpers in the meter can - you name it - there's little these investigators haven't seen. Time and again, the cycle repeats itself. Day after day, a wide variety of customer transgressions are uncovered just behind the meter, but what if a much larger, much more impactful opportunity was hiding in plain sight?



Cindy Garrett Hux

SCANA Quality Assurance is responsible for the identification, tracking and recovery of potential revenue losses for South Carolina Electric & Gas (SCE&G) and North Carolina based PSNC Energy. Current joint efforts with Corporate Revenue Protection explore potential losses and the relationship to write-offs and revenue recovery. Part of the effort focuses on customer behaviors as they relate to credit policies, providing clear opportunities for Revenue Protection to leverage this behavior in reducing losses. Primary areas of concern include:

Fraudulent Application for Service

Although somewhat routine, fraudulent applications can remain undetected for years. Research is required to vet the history of both the customer and premise. Many times, a large balance, a disconnection for non-payment, or multiple inquiries at a premise are standard red flags for fraud. Field orders often pay dividends; unearthing critical details for what records indicate to be a vacant property, such as established fixtures (i.e. toys in the yard, vehicles parked out front, manicured plants, etc.). Information can also be confirmed through landlord verifications, public records verification and interviews with neighbors.

Medical Moratorium

Customer behaviors associated with a Medical Moratorium can result in a write off comprised of months of unpaid usage. During winter months, regulation requires a customer with a doctor's statement of medical necessity for power, cannot be turned off for non-payment. Many programs

require no payment during the exemption period. The program generally runs December through March. Customers may already have large balances prior to moving into the moratorium period. Nearing the end of the moratorium period, Revenue Protection is called upon to verify occupants, document premise activity, and notify customers of impending service termination. Once the period has expired, Revenue Protection will return to terminate service should satisfactory payment not be received. The information obtained prior to expiration helps reduce further losses and expedites the recovery process.

Returned Checks

Systems are not always in place to eliminate a customer's ability to present multiple checks that are returned unpaid. This generally stops any credit action and the customer has the opportunity to continue service, all the while increasing their outstanding debt. It is illegal in most areas to knowingly present a check where the funds are not available. Revenue Protection investigators are a great resource for making field visits to customers. They may during the course of the visit, document the status of the premise and inform the customer of the recourse the company has for collecting returned checks. From our experience, this customer behavior can be responsible for large write-off balances.

While the topics reviewed do not represent all of the opportunities that exist in an organization to mitigate or recover loss, they are all representative of one common ingredient for success: communication. Increased communication across supporting departments, coupled with cross-training and a singular commitment to achieving the same goal, will yield the greatest return.

75% of Public Unaware of Meter Tampering

By Caroline Boden (Grosvenor Service Group)

NEW RESEARCH HIGHLIGHTS GENERAL PUBLICS
LOW AWARE-NESS & KNOWLEDGE OF ENERGY THEFT

As the sector continues its focus on detecting energy theft, understanding and acting on public perceptions is an area (one not heavily focused on to date) that could support current efforts.

This valuable insight could better inform strategies to build consumer awareness and support. Not only could this help prevent incidents of energy theft occurring in the first place, it could also help increase the chances of tip offs and successful detection.

To examine this aspect more fully, UKRPA member Grosvenor Services Group and its parent company Echo Managed Services have undertaken a major study of 2,000 households across the UK. The resulting report explores current attitudes, as well as investigating which strategies will be most successful at winning over the public's support in the battle against energy theft.

Key Findings

- The public are overwhelmingly in favor of action against energy thieves and would approve of greater action being taken.
- The fact that energy theft adds £20 annually to every bill is not widely known but is a very powerful motivator that increases public anger with the practice.
- Those sympathetic to energy theft see it as a victimless crime and one that is justified by 'unfair' energy costs.
- 39% of people are unaware of the safety risks posed by energy theft.
- Anonymity is the key factor in encouraging greater reporting of energy theft.
- Guaranteeing confidentiality and raising awareness of reporting lines could tackle 63% of all non-reporting.
- 75% of consumers don't currently know how to spot signs that energy theft is taking place.
- 14% of people remember seeing media coverage about energy theft in the last year.

These findings are concerning, and as a sector we need to be asking ourselves how we expect to increase detection and meet industry targets when the general public has such little knowledge of energy theft.

We must come together – energy companies, suppliers, stakeholders and the media – to significantly increase consumer awareness and raise the profile of this dangerous crime. Hopefully this research report will play a part in both generating media coverage and driving discussions around how we do more in this area.

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**Making sense of Mega Watts in a
Mega Byte world:
Samuel E. Causey Jr.
President Emeritus SSRPA,
President SCRPA**



Samuel E. Causey Jr.

These days it seems that our work in the utility industry in no way resembles the way we did business even five years ago. Between data mining, metering analytics, temperature graph matrixes; it's as though our side of the business dealing with utility thieves, is drastically out of step with the new business model our companies have adopted.

How can we demonstrate our value to a technical savvy work place while performing old-school, boots on the ground investigative work?

How can we convince the powers that be that no computer program is going to truly eliminate the need for an investigator who is plugged in to the community and knows where their case load is best?

What can we do to take hard data, observations, gut instincts, and turn them into profitable and measurable rubrics for success?

The key to beginning to answer these three questions and the myriad of tertiary questions spawned from them is not very simple, due to the differing pieces and people that make up each individual company.

The following bullet points do have basic elements that every investigator can use to find themselves in a position to grow the value they add and demonstrate that to their supervisors.

- **Network-** Just because you may not be technically proficient, there are those around you who are, and by partnering with them, you add to their value and provide yourself with a way to better demonstrate your success.
- **Document-** By articulately stating the outcomes of your investigative efforts, you allow yourself to see a history of what works consistently, and what doesn't.
- **Seek Information-** Newly developed resources are often created to answer specific questions, and to document a certain set of data, I have found that once I understand the data the system analyses, I am able to find new data relevant for my investigation that new software can compile.
- **Admit Areas of Weakness-** Don't be afraid to admit you aren't familiar with the new databases. In my experience, developers are more than willing to go to great lengths to show off their creation, and most will gladly work with you to bring up to speed on using their product.

- **Challenge Accepted Norms-** Just because a system wasn't necessarily designed to do something, doesn't mean it's not capable of performing additional work outside of parameters.
- **Don't Fear Technology-** Technology is here to stay and if you will take the time to understand it you can leverage that information to raise your value, increase your productivity, and grow your investigative success.

As we go forward, I believe we can all agree that technology will play an increasing role in our day-to-day workload. If we can grow our understanding for the value technology brings and challenge ourselves to embrace it, as the catalyst for success it can be, we look at technology as not a competitor, but a companion to help us be better versions of ourselves and allow us to more efficiently perform our jobs.

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Theft of Services: A Problem that Adds Up

By David Bowler, Security Specialist - Emera Maine



David Bowler

In 2015 I wrote an article that addressed methods that I used to investigate and deter substation copper thefts. In this article, I will cover another ongoing problem requiring attention, namely theft of electricity. Although individual cases can vary in size, electricity theft is a widespread and costly issue in this industry. Through proper training, information gathering, reporting, and relationship building, I've been able to investigate dozens of cases on an annual basis that have resulted in criminal charges and recovery of lost revenue.

When I first started this job in 2012, the President of the company said he wanted me to start aggressively pursuing his "pet peeves," diversions and illegal reconnections. He told me that the company was done treating these issues as "part of doing business." Since then, I've been going after these thefts and have worked hard to get to where we are in managing these cases. The majority of the cases I've handled are residential illegal reconnections. In the beginning I knew very little about theft of services, but as I learned more about these incidents I became a more effective investigator. I came to know that each theft was similar, but also had its own unique distinctions.

Knowing that I couldn't get to every single theft case myself, I had to create a plan that would help streamline these cases so that they were manageable. I needed resources. Part of my plan was to train some of our frontline workers so they were equipped with the means necessary to capture important information and share it with me.

So, I provided training to all of our Meter Technicians, Line Crews, and Contractors. This training simplified procedures and became an effective method for providing me the information I needed to make a case. The following procedures were implemented:

- Be aware of your environment.
- Watch for people coming out of the residence to confront you.
- If things become "unsafe" - leave.
- Listen to what people say to you while you are there.
- Write a brief statement as to what occurred while there, in case theft ends up in court.
- Most importantly, take pictures and seize anything that would be considered evidence.

In addition to training our crews, I've provided training to more than 250 police officers across our service territory. This is a practice still in place today that's highly beneficial to my investigations.

After I've gathered the appropriate information on the theft, I complete a report that includes a case file that contains pictures of the scene, electronic readings, and a restitution request. Following the completion of the case file, I contact the authorities for that area and file a formal theft of services complaint. This can be done in person or electronically. When dealing with restitution requests, the courts have been responsive when it comes to getting restitution back to the company. Generally the restitution on a theft of services would include costs to replace any cut meter seals or padlocks, and/or the stolen electricity, and associated labor. A typical case will have a Meter Technician and a Line Crew assisting with the disconnection, and those costs can add up.

The process of inspecting a potential theft of service can be interesting. Law enforcement plays a major role in these cases as I often call upon them when we go to inspect potential theft of service incidents. Because they are familiar with the area, more often than not they will already know the residence and the people involved. Sometimes I call the department of jurisdiction to see if there are any unsafe conditions or suspect individuals at the residence under investigation.

There are times when they recommend that we don't go to a residence without a police escort. It is much safer and more effective for an officer to go with us. While we're inspecting the service for tampering, the officer can begin their investigation. The other reason I like a "uniform" present is the deterrent factor. For example, if you are in a mobile home park doing a meter inspection and the officer is talking to your person of interest, everyone in that park is watching what is going on. Word will spread very quickly once you've left. People might think twice about illegally reconnecting themselves if they know the police are involved.

Due to constrained resources, some cases are not worth investigating. Furthermore, law enforcement agencies are extremely busy, so I only give them quality cases.

There are multiple difficulties when dealing with theft of services cases. Collecting enough information to build a case and including law enforcement to secure the scene are just two of them. Another issue that I often deal with is diversion. Diversion cases present their own challenges because the "stolen" services aren't as tangible. When taking a diversion case to the DA's office, I've run into trouble because I can't give the DA an actual amount of electricity stolen, I can only provide an estimate. One DA told me "if I can't

give them an accurate figure on how much electricity was stolen then he can't give me a complaint." I responded by saying "If I go into a store and steal an arm full of candy bars and I drop a couple on the way out and I eat a couple in my car, we don't know how many candy bars were stolen but we know there was a theft." Diversion cases are similar. We don't know how much electricity was stolen but we know there was a theft. Now I'm pleased to say that all the DA's in my service territory are the same page and are accepting my theft of services cases.

In six years of doing this job I've had only one case

go to trial, and the result was a guilty verdict. In the last two years, over 40% of the cases I investigated resulted in criminal charges and 100% of those have ended up in a guilty plea—minus the trial.

I'm fortunate to work for a company that takes theft of electricity seriously and gives me the resources I need to do my job effectively. Comparatively speaking, my company is quite small but has still afforded me opportunities to investigate theft of electricity. This problem is not going away, so I will continue to aggressively investigate these cases and bring as many as I can to resolution.

Theft Hardening – Partnerships are Key to Success

By Kevin Lumsden



Shortly after assuming my current position as Supervisor, Theft of Energy for Baltimore Gas & Electric, I was asked by company management what a good measure of success would be for a utility theft organization. Without having to think on that question very long, I replied, "*to see a continual reduction in work volume by using the same or fewer resources*". I felt that statement best typified improvements in efficiency that make a difference in a measurable way. When your efforts are changing your environment's

culture and realizing a decrease in work volume, that's a true measure of success (for theft anyway!). This mindset also led to the concept of Theft Hardening - a BGE initiative designed to make our system more resistant to theft. It's about moving away from reactive and becoming more proactive in dealing with the often overt, destructive and epidemic scale theft BGE sees in its service territory.

Theft Hardening capitalizes on the psychology of theft, an indirect proportion between risk and incentive. When risk (severity/difficulty) outweighs incentive (benefit/reward), theft generally decreases. It does not matter whether the end product is gas, electricity or any other tangible item subject to being stolen. Every individual will reach a different threshold as to when the personal risk becomes too great, and individual tolerance generally drops with a corresponding increase in risk. Raising the risk level higher forces individuals to increase their thresholds for the same reward – this typically causes one to rethink whether the benefit of stealing is worth it. Theft Hardening's driving focus is to continually raise the risk/severity/difficulty level through a number of different avenues.

While Theft Hardening comprises many components, one area where BGE has been successful in raising the risk/difficulty level was in new product development. BGE has over 200,000 overhead services within its territory and individuals often restore the service at the service head (where utility feed intersects with a customer's service entrance cable). There was no commercially available product to protect a service when disconnected at this juncture (and removal of the utility feed is not always possible due to twin or shared services). Recognizing a critical need, BGE collaborated with the Marwell Corporation to develop an innovative solution – the Theft Sleeve.

Continued on page 16



Theft Sleeve Internals



Installed at property

The Theft Sleeve is the first product tailored specifically for protecting overhead services. It is a clamshell design that fastens around overhead wires at the service head. It can be used to keep a disconnected service off, or to protect a legitimately energized service. Security head screws fasten the open ends and a length of line hose provides additional protection from skinning the wire and reconnecting the overhead utility feed.

BGE has installed numerous sleeves in some very challenging environments with repeat offenders, and to date the sleeves have been 100% successful in preventing restoration of service. The sleeve has been a good example of the “psychology of theft” in action where a new product elevated the difficulty to a level that offenders chose to move elsewhere rather than attempt bypassing it. It’s also been satisfying proof that our Theft Hardening efforts are working.

If you are a utility with a unique issue, make sure you are having discussions with your manufacturing partners – you might be surprised at what they can build to help you solve the issue!

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DEALING WITH PROSECUTORS WHAT WORKS, AND WHAT DOESN'T

Thomas J. Sansone Esq.



Thomas J. Sansone

For the past 20+ years, I've been interacting with prosecutors in state criminal courts in my role as counsel to the victim in theft of utility service cases. A successful experience with a prosecutor is one that results in a suitable restitution arrangement, the incarceration of the accused, or both. Obtaining such a favorable outcome, however, is no simple matter.

Many factors create challenges for victim's attorneys, especially in the area of utility theft. First, utility companies are not the most sympathetic of victims. They are perceived as large, impersonal, monopolies, which charge exorbitant rates to the consuming public. Strike One! Second, theft of utility services is viewed as a "victimless" crime, a perception fueled by the misperception that no one has to pay for stolen utility service, as well as the false belief that no one can be physically injured by such theft. Strike Two! Third, prosecutors have limited resources, and prefer to devote those resources to high profile crimes, such as homicide, drug trafficking, rape and child molestation cases. Furthermore, many prosecutors are put off by the "technical" aspects of theft of service cases, and can't be bothered with learning the science that explains how the theft occurred. Strike Three!

So, what's a utility company lawyer to do? Over the years, I've found that the following strategies greatly enhance the potential of being taken seriously by prosecutors in the criminal justice system.

- A little humility goes a long way. The prosecutor is already disinclined against me because, like my client, I'm perceived as a member of a wealthy, impersonal profession, who has no appreciation for the plight of the "little guy." Knowing this, I've got to do my level best to present myself to the prosecutor as a "regular guy," who's just trying to do his job. I do my level best to avoid looking or sounding pretentious or patronizing. I try to establish a rapport with the prosecutor. Perhaps, I overheard her speaking to another lawyer about last night's Yankee game. Now, I know that she's a baseball fan, so I've got something to talk to her about. Maybe, I noticed that he's wearing a runner's watch. Now, I can mention to him that my wife is a distance runner. It's these little seemingly inconsequential observations that may help break the ice with an otherwise standoffish prosecutor that may eventually facilitate the favorable result I'm seeking.
- Offer to provide copies of the company's investigative report to the prosecutor *and* provide a layman's "translation" of the technical terminology contained in the report. This will help allay some of the prosecutor's apprehension about handling a case that involves what

appears to be complicated utility concepts and configurations.

- At the appropriate time, typically after you've taken the first two steps, make your "elevator speech" to the prosecutor. An elevator speech is usually about a minute long—the amount of time it would take passengers riding an elevator in a tall building to get from the top floor to the lobby. Prosecutors are busy people, so I keep this speech as short as possible. In that speech, I try to make two points: first, theft of utility services is *not* a victimless crime. Someone has to pay the cost of the stolen utility service, and that someone is every ratepayer for that utility company. So, there are indeed victims to this crime. Second, the manipulation of utility facilities, particularly electric and natural gas facilities, carries with it the vast potential for creating ultrahazardous conditions. After all, amateurs tinkering with the metering and ancillary facilities used at a business or residence are likely to "get it wrong" when they tamper. That means that there is a high risk of fire (electricity) or explosion (natural gas), which can injure innocent neighbors or children of the tamperers. And, if you want to add a little more color to that speech, let the prosecutor know that, in most building fire scenarios, first responders follow a protocol whereby they disconnect power to the building *at the meter*. If the meter has been bypassed, the system is still electrified, notwithstanding the disconnection of the meter, which means that fire personnel who spray water on the fire run a high risk of electrical contact or electrocution. So, the tamperer has put their well-being in jeopardy as well. Still think it's a victimless crime, Madame Prosecutor?

Once I've undertaken all three of these strategies, I find that prosecutors are much more willing to listen to me, and involve me meaningfully in the criminal process. And, if I'm fortunate enough to handle multiple cases in the same courthouse, with the same prosecutors (and judges), eventually, I can build up enough "street cred" that I no longer start the process with three strikes against me. Instead, I will be viewed as a person who can facilitate a resolution of the case, by participating actively in the plea negotiation process, ideally by putting a workable restitution payment schedule in place, reinforced by the threat of incarceration if the defendant fails to adhere to that schedule.

Tom Sansone has practiced in the civil litigation arena in Connecticut for nearly 30 years, representing individuals and companies in a wide variety of business-related and personal disputes. Amongst his many utility related cases Tom successfully litigated utility company's request for security deposit against commercial debtor in contested bankruptcy court proceeding in one of the first test cases under the revised Bankruptcy Code. He also represented a utility company that was victimized by a customer's theft of natural gas services, ultimately negotiating a six-figure settlement for the company as part of the customer's criminal plea agreement.



SSRPA, SCRPA, SURPA, 2019 TRAINING SEMINAR ANNOUNCEMENT

S.S.R.P.A. is:

- Utility Theft Investigators across South Eastern United States
- Promoting Safety, and unified best practices
- Empowering members to educate others to better investigate and eradicate utility theft

Utility Theft Training Seminar

JUNE 11-14, 2019
Crowne Plaza
5700 Westpark Drive,
Charlotte, NC 28217
1-704-527-9650

- Event Registration is \$250.00 if received by May 22, 2019.
- If sending after May 22nd, registration fee is \$275.00.
- Room rates are \$139.00 per night.
- ***Please mark your calendars on these dates to get this great opportunity in your 2019 budgets to increase your knowledge in the areas of Revenue Protection.***

In order to better serve the members of our associations, the South Central Revenue Protection Association, and the Southeastern Revenue Protection Association have decided to merge into a NEW organization, the Southern States Revenue Protection Association.

The boards of SCRPA and SURPA are currently working out the final details regarding bylaws and structure.

It is our sincere hope that the new group will allow utility partners from Cooperatives, IOU'S and Municipalities across the Southern States to better serve our rate paying members, customers, investors, and the communities we so dearly love.

We will incorporate the best practices and safest procedures to partner with law-enforcement, and fellow Utility Professionals to create a cohesive program that allows all of us to shine.

The new organization is proud to announce the 2019 training seminar.

The training seminar is open to Utility Theft Investigators, Law-Enforcement Officers, Credit and Collections Professionals, Internal Auditors, Fraud Investigators, and members of the Utility Community.

The 2019 Conference will be held at the Crowne Plaza in Charlotte North Carolina on June 11-14. As always, we will also have a Vendor's Reception and hospitality suite for extended opportunities for networking with experts and Vendors in your field.

Topics will include:

- **Vendor Presentations**
- **Hacking Smart Meters**
- **Active Shooter**
- **AMI Analytics**
- **Dealing with difficult people**
- **Investigative Procedures**
- **Court Appearance and Testimony**
- **External Relationships (law enforcement, judges, solicitors, code enforcement, contractors and community members)**
- **Sovereign Citizens**

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IURPA • 28 Years

The International Utilities Revenue Protection Association was founded in 1990 to protect member utility companies worldwide from revenue losses associated with unauthorized use of service. In twenty-four years, the organization has grown from a small regional group into an association that includes representatives of more than 400 utility companies around the world.

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