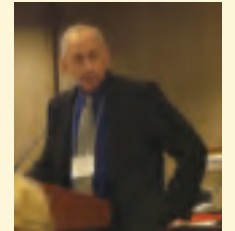
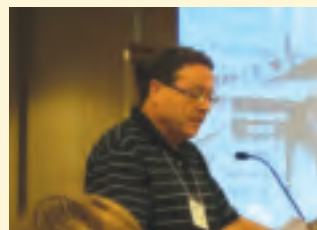
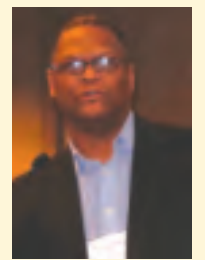
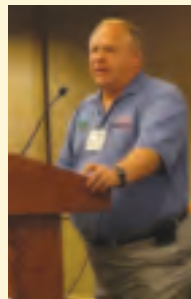
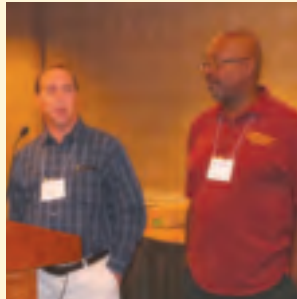




Volume 23 Issue 2

October 2013

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From the Chairperson

In the past 20 plus years that I have been a Revenue Protection professional I have seen many changes in the utility business, specifically in the revenue protection area. Perhaps the biggest change has been in the availability of metering data. As companies have installed AMR/AMI metering systems revenue protection professionals have worked hard to make use of the data that the meters are able to provide. We know this data is valuable and we know that there is more data than we as individuals could ever translate into usable information. Our information technology departments are dealing with the mountains of information and our revenue protection/revenue assurance analysts assist those not involved in revenue protection to understand how to make the information talk to us in a meaningful way. The projects are long term, complicated and some of the most important projects we have been involved in recent history. The algorithms used to put the metering data together with other publicly available information to give revenue protection the leads necessary to detect theft of service and other irregular metering issues are not the wave of the future; it is our present.

However one thing has not changed with all the information available to utility professional. No matter how much information you have the confirmation of the theft or irregular condition must be made at the service location. You can have all the data available in the world but someone has to leave the computer and go to the service to confirm



Pat Uhlman
IURPA Chairperson

what the data is really saying. All this information is not going to make revenue protection/assurance departments obsolete in utility companies but will do just the opposite. The revenue protection/assurance areas will need to deal with theft of service in a timely and aggressive manner in order to keep up with the information provided by metering data. This work will be expanded and must be the focus of all employees. However it will be the revenue protection professionals, such as the members of IURPA, which will quantify and recover the loss and, when appropriate, bring the responsible parties before a court law.

This will be my last newsletter as chairperson and I would like to thank the membership and the board for that honor.

That is why membership in IURPA will be important for companies as they go forward with the information obtained from all the expanded data sources. The sharing of information will be critical for success as new ways of translating data are discovered as well as the sharing of the new and as of yet undiscovered ways that some of our “customers” try to avoid paying for the commodity they use. Become involved in your regional organizations, attend the conferences and make those important networking connections with some of the finest individuals you will ever meet.

I would like to welcome Steve Sprague of Portland General Electric Company and Michael Rhode from the South Africa Revenue Protection Association as the newest members recently nominated to the IURPA Board at the 2013 Conference held in Lake Tahoe, CA. Congratulations to Jim Gibson of Pacific Gas and Electric who was named Revenue Protection Professional of the Year. These are just three of the many professionals involved in fighting theft of service throughout the world and their extensive knowledge is available to any member of IURPA.

This will be my last newsletter as chairperson and I would like to thank the membership and the board for that honor. Wayne Wohler of Los Angeles Department of Water and Power will be the 2014 chairperson and I cannot thank Wayne enough for taking my place at conferences that I was unable to attend. Wayne is such an incredible representative of IURPA. I would like to thank the IURPA Board and all the former IURPA chairpersons who work tirelessly each and every year on the mission of IURPA fighting theft of service. As I said earlier in this article, these are some of the finest individuals you will ever meet.

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A VERY BIG DOG

(ENHANCING THE VALUE OF AMI) BY: LEE J. HOLOVNIYA

You have a car... probably one with an alarm. You lock your car when you leave it in the parking lot of the grocery store, or the local Wal-Mart. You lock your car when you leave it at the airport, the pharmacy or the convenience store. Everyone knows you lock your car and set the alarm when you leave it because they always hear the “chirp-chirp” as you’re walking away. Why do you lock your car? Your car contains valuables. Your car IS valuable.

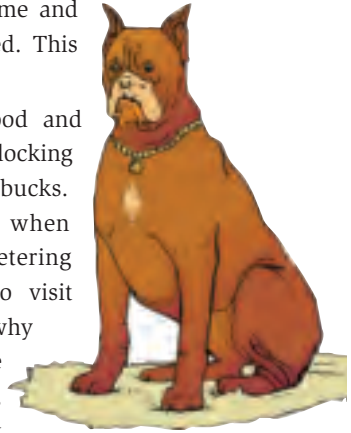
You have a home. When you leave your home you lock the doors and windows, don’t you? I don’t know anyone who doesn’t. (well, I do know one person who doesn’t. But that’s one out of thousands!) You, on the other hand, have good sense. You lock your doors and windows...even if you have an alarm in your home. Why do you lock your home? Your home contains valuables. Your home IS valuable. YOU are valuable.

My house doesn’t have an alarm... but I have something better... a dog... a VERY BIG dog. I’ve always had a dog. Well, not always. I got my first dog after my home was burglarized many years ago. Since I’ve had a dog, I haven’t had a theft problem. My dog weighs 130 pounds. He’s much better than an alarm because when he hears a noise outside, he lets out a low growl. It’s actually more of a rumble, the kind you can feel in your chest. It is a primal sound, percussive in nature like something out of one of those space creature movies, very scary. When this happens, I know the person on the other side of the door will think twice about entering my home. That’s the way I want it. When a stranger comes to the door I always answer with my big dog at my side. I want everyone to know... I have a very big dog. My dog is much better than an alarm because he prevents theft. I still lock my doors and windows when I leave the house but the person who thinks about entering my home and hears my dog on the other side of the door surely thinks about how much damage will be done if he proceeds.

So, what’s my point? Utility companies everywhere are “leaving their meters”. That’s right, for the first time since energy was measured to determine revenue at the point of use, meters are being left unattended... for long periods of time. First it was AMR that enabled utilities to read the meter remotely, perhaps with a drive by once-a-month. No more looking up-close at the meter, tugging on the meter seal, irregularity reports, etc. More recently, AMI technology has virtually eliminated the need to visit the meter and “smart meters” promise to revolutionize how we use electricity and control appliances in our homes. Now, some meters are left alone for years. A growing number of utility companies are taking a proactive approach and locking these high tech cash registers. Still, a surprising number of utilities seem to feel that leaving the “alarm” on is enough. Imagine going away on

vacation for months at a time and leaving your house unlocked. This is really no different.

Folks, this is motherhood and apple pie. A good meter locking device costs around ten bucks. That’s pennies per year when amortized with the metering equipment. You’re going to visit every meter anyhow, so why not lock the meter while you’re there? At \$10 each, the additional cost to set 80,000 meters would be \$800,000.00. Hmmm, sound like a big number? Hold that thought.



The average loss to theft for utility companies in the United States is right around two percent. But history has shown that a good theft prevention program can reduce losses due to theft to less than one percent. Doesn’t sound like much, does it? Wait a minute! What’s the annual revenue at your utility? Let’s look at a realistic example. In this case, an 80,000 meter electric utility generates around \$180,750,000.00 annually in revenue. Quick, what’s two percent of that?... \$3,615,000.00 - WOW - A BIGGER NUMBER. You want to reduce that number. Are you thinking what I’m thinking? Spend \$800,000.00 once to cut a loss of \$3,615,000.00 in half in each of the following 15 years. If you want to protect some of that revenue, alarms are OK, but what you truly need is a VERY BIG DOG! Why? Because it is a known fact that BIG DOGS PREVENT THEFT! In this example, that’s a \$27,112,500.00 gain over the expected life of an AMI project with 80,000 meters.

Locking your doors, like having a BIG DOG, is about prevention. Locking your AMI meters is about prevention. Alarms can only alert you after something has happened, then YOU must REACT! But good quality locks, like a very big dog, will cause most would-be thieves to think about the damage their actions may cause. This prevents theft. Using a good quality well engineered meter locking device with a highly pick resistant barrel lock is like having a very big dog. It doesn’t need to snarl or growl or bark or bite. It only needs to be there for people to see in order to prevent 90% or more of tampering. Good quality locks used in conjunction with the tamper detecting capabilities of the meter and data analytics make good sense.

A good quality lock on every AMI meter will provide safe and reliable remote disconnect capability while protecting your valuable asset, and more importantly, the critical data streaming to and from it.

COMBINED FORCES WITH THE POLICE, GEAR UP ISRAEL ELECTRIC CORPORATION (IEC) REVENUE PROTECTION EFFORTS

By ITZICK MICHAELI, REVENUE PROTECTION MANAGER, ISRAEL ELECTRIC CORP.

During the last two and a half years, prices of electricity in Israel rose by 33%. The main reason for this steep hike was the complete cessation of the flow of natural gas from Egypt to our power plants. IEC was forced to switch to purchasing and burning expensive fossil fuels, and the enormous costs were imposed on the consumers.



Itzick Michaeli

Alongside the rise in electricity prices, we feel a very significant increase in the volume of thefts, especially by many business owners who were transferred gradually to the Time Of Use tariff, according to the Public Utility Authority guidelines.

We have dealt with electricity theft for many years, and each year we expose, verify and neutralize 3,000 to 4,000 cases of theft. These numbers represent more or less, our case handling capacity using the resources at our disposal.

Unfortunately, we are aware of the troubling fact, that the volumes of electricity theft are significantly higher, and the losses are estimated at about 50 million USD a year. We succeed in recovering nearly 5 million USD a year, and our financial division calculated that the added value of returning fraudulent customers into the paying circle is worth nearly an extra 6 million USD annually.

According to the Electricity Law and the Penal Law, electricity theft is a criminal offense and is punishable by up to five years in prison.

Ostensibly, the courts were supposed to send thousands to prison every year.

But, the reality is completely the opposite. In order to start criminal proceedings, the first thing we are expected to do, is file a police complaint against the suspected thief or more precisely, against those who enjoy the fruits of the theft.

Ifiling a complaint takes too much time, and the revenue protection investigator usually wastes precious hours at the police station, instead of working in the field, exposing more theft cases. Following the long wait, when it's finally our investigator turn to file the complaint, he usually wastes more valuable time, explaining to the officer recording the

complaint, what exactly is theft of electricity, what are the damages, and plenty more technical details that the officer never heard about.

The major problem is that stolen electricity is something virtual and intangible. It is definitely not like a stolen wallet, or a stolen car, or a break into a house. Even worse, in most cases at the end of the procedure, after a few weeks or even months, we receive a message from the police, stating that case was rejected for lack of public interest, or more annoying, for lack of evidence, even though we supplied the police, photos, video, and written evidence.

This kind of attitude prompted us to decide to focus on just a few types of theft of electricity, identify special characteristics, and only in these cases we file a police complaint and carefully track the process.

The major problem is that stolen electricity is something virtual and intangible.

In these cases, when we learn that a complaint was rejected, we present immediately an appeal, and that usually works like magic, and drives the police investigator to reopen the case and investigate it properly.

Every once in a while, we were assisted in special cases of theft of electricity, by the company's Security Unit. The Security Unit main mission is the protection of power plants, substations, power lines, office buildings and employees who work in dangerous areas.

Sting operations of the Security Unit, in coordination with the Israel Police detectives and the Revenue Protection investigators, led to exposing of large cases of organized and serious electricity thefts.

Five years ago we started to toy with the idea of creating a special unit, dedicated to gathering intelligence and investigating copper thefts and large scale electricity thefts, and especially those cases that have been conducted by contractors and criminal offenders.

After endless discussions and approvals, the Investigation and Intelligence Unit, was founded on January 2013. The Unit manager, reports directly to the company security manager.

There are four investigators, all of them are graduates of the Israeli Police special units, and have extensive experience in the field. Their biggest advantage is their familiarity with the police routine, allowing them to cooperate effectively with the regional police stations, and remove any obstacles and delays in any planned field activities.

All four investigators are skilled in recruiting and activating agents and collaborators. Those skills are essential when detecting power thefts that have obvious signs of contractor's work, like marketing his services to potential customers who seek a reduction or even an elimination of their electricity bills.

The Israeli Police Force, established two years ago, a new unit, centered in combating the vast invasions into state owned land and illegal construction of buildings.

In many cases, the invaders who live and run business on

the compound are related to crime families that are usually engaged with any criminal activity that brings them cash and assets.

It is difficult and almost impossible for us, to get into these compounds during a workday routine for meters reading or meters inspection. The special police unit coordinates a planned raid on the compound that also attracts the attention of the Tax authorities, the Ministry of Interior, the Ministry of Health, State Land Administration, the Electric Company, the Water Authority, the State Attorney, and more.

On the operation day, all agencies invade the compound, and each agency investigates its targets, free of worries of violence or non-cooperation. In most cases, we identify electricity theft on an impressive scale, feeding all illegal buildings on the compound. There is no other way to expose and naturalize these cases without the heavy and efficient police presence.

Since the beginning of 2013, ten successful raids yielded excellent results for all stakeholders, and hopefully also hopefully created a deterrent in the long run..

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SOMETIMES YOU FIND WHAT YOU ARE NOT LOOKING FOR

By MIKE CAPITANO, NURPA

I am very fortunate to be part of an outstanding Revenue Protection group. PPL Electric utilities is responsible for serving over 1.4 million metered customers. Our group falls under the Revenue Assurance umbrella. In essence, we are responsible for identifying the cause of revenue loss, facilitating the correction of the problem and insuring that a process is created to quickly detect or completely avoid the reoccurrence of similar problems in the future. Think about that for a moment. Find it, fix it and make sure it can be identified quickly or eliminated in the future. Pretty impressive, don't you think?



Mike Capitano

What better time to tamper with an electric meter than on weekends when the power company employees are not working!

We have transitioned from a reactive group that basically handled theft of service and fraud cases only, to a proactive technology based team that focuses on the entire revenue cycle. Long gone are the days of striving to reach a money goal that was entirely dependent upon how much revenue was being lost by our company. Our very existence became dependent upon how many dollars we were able to recover. If our cost ratio was 5 to 1 we were golden. If a customer was rebilled for a metering equipment failure for a 48 month period, we were thrilled. We had recovered lost revenue for our company.

Today we have goals that emphasize finding revenue loss quickly. The quicker the problem is found and fixed, the less of a burden on the customer through rebilling. We recover less money because less money is being lost. A 48 month rebill has become a more manageable two or three month cycle that places less of a burden on our customers. We are not waiting for years to recover the money that was owed to us for the services we provided. This change in philosophy was accomplished because we have embraced the available Automatic Meter Reading technology. We currently do very little reactive work. The key is our ability to create and run queries on various usage anomalies. The queries can be run on a variety of criteria. We currently run 8 different queries. These queries are:

- Drop in usage (Usually transformer rated large commercial customers) a 33 % or more drop in usage from their previous historic average.

- Zero Usage (usually transformer rated large commercial customers) A consistent usage pattern that suddenly drops to zero)
- Meter Blink (When a meter is removed from its base)
- No Blink (Break in meter communication)
- Flat Line Usage (When an account shows no increase or decrease in recorded usage)
- Stop Meters (When a residential meter suddenly stops recording usage)
- No Weekend Usage (When zero use is recorded all weekend)
- Six consecutive hours with no usage (Six hours or more of consecutive zero usage)

Several additional queries have been created and tested. Only those that prove to be fruitful remain part of our stable of revenue finders. We still handle theft of service. In fact, we continue to prosecute customers in a court of law. The charges ranged from theft of service, to criminal mischief to risking a catastrophe. Sometimes a customer will illegally reconnect themselves but leave our service area before we can solicit law enforcement to file criminal charges. In these cases we simply cut our losses and insure safety is maintained at the premise. In some cases an accused customer will flee into a near-by state. Charges are still filed but law enforcement will not usually extradite over state lines.

The purpose of today's article is to report on the early findings of our two newest queries. Originally thought to be a theft finder based on the assumption that an occupied full time non vacation home should have recorded weekend metered usage, the zero use on weekends audit has produced some widely varied results. We have discovered vacant and foreclosed homes or locations that are gutted and are being completely renovated. The construction is



obviously being conducted during the normal work week. In this case the zero weekend use is easily explainable. In some instances we have found large older homes that have been converted into rental office space. A legal office is a common use for these refurbished homes. Again, zero weekend use is probable. A quick check of the rate sometimes results in follow up action.



Then, of course, there are still customers who remember the good old meter reading days. What better time to tamper with an electric meter than on weekends when the power company employees are not working! The vast majority of the tampered meters we have found have been localized. A “fixer” who tampers with meter is hired to perform the task. The fixer usually follows the “Friends and Family plan” You know, where you find one case of meter tampering there are usually more near-by. The traditional hole drilled into the glass and a wire inserted to stop the disc, has been replaced with a more modern technique. A wire is attached to an open potential clip on the back on the meter. The wire is run to a switch so the rate payer can enjoy all of the comforts of home while they turn the meter on and off at their leisure. A smart fixer will install a dimmer switch. In this instance, the meter is slowed down without shutting off the total registration. This technique is very difficult to detect.

In our second new query we reviewed customers that had 6 consecutive hours without metered usage. We were equally hopeful that we would uncover several more theft cases. Surely this would be a similar catch all. As we field checked over 900 of these leads during a three month period, we did not find a single theft case. What we found was enlightening.

The vast majority of these meters were beginning to stop registering kwh consumption. The criteria of 6 consecutive hours or more of zero usage was occurring at numerous

times and for longer durations during the monthly cycle. If the meter was not changed, the next monthly cycle showed even more instances of zero recorded usage. Finally the meter would completely fail to register usage. What we had stumbled upon was proof that electronic meters slow down for a few months before completely failing.

What’s The Big Deal?

Think about it. A stopped meter requires customer notification, tracking of new usage after the meter change, rebilling of the faulty meter billing periods and repayment terms & conditions for the customer. I have not even mentioned the Public Utility Commission complaints that sometimes result from the rebilling process.

Why not nip the problem in the bud? What If we can change the meter and the first indication of a registration problem? The slight loss of revenue we would experience by quickly changing the meter and not rebilling the customer would actually save us money in the long run. The “seamless transition” would be a win/win for the customer and the utility. Sometimes you do actually find what you are not looking for.

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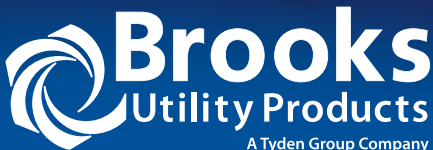
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LOOKING BACK AT 2013 AND MOVING FORWARD TO 2014

By JORGE CERMENO - SURPA PRESIDENT

Looking Back at the 2013 SURPA/SCRPA Conference:



Jorge Cermeno

First and foremost, it was the privilege of the 2013 SURPA/SCRPA Conference committee to be able to provide you, our fellow Revenue Protection professionals, with the excellent agenda in West Palm Beach, Florida. Countless hours of hard work transpired to have this seminar happen without a hitch.

The setting along the east coast of Florida seemed attractive to most attendees. Once Miami was ruled out as too costly, the Board decided on the West Palm Beach site. The Marriott Hotel was a wonderful host from June 11 to June 14, 2013. The downtown area in itself featured many nice restaurants that we could choose from. For those who were fortunate to attend, we hope we met your expectation.

An overview of this year's presentations is as follows.

Brevard County Sheriff Wayne Ivey had presented at our conference in years past. This year, his personal accounts of safety related issues made a lasting impression on the group. The Sheriff spoke of being aware of your surroundings in the field or while shopping at the store. Much caution is needed too when you arrive at your home. One never knows when the criminal will catch you off guard. Before entering your garage or door to go inside, be on the lookout for someone trying to rob you of your personal belongings. His support of our organization over the years is always appreciated.

Florida Power and Light Corporation's Steve Anderson and Alex Gutierrez spoke of the AMI implementation at their company. From the beginning, all personnel were fully informed and engaged in the process. Once the installation was completed, many benefits became obvious. Just to mention a few, tamper alerts have been addressed in a quicker fashion and Data Mining became essential to properly backbill the customer. Investigators were kept busy with the many tampering cases identified while the new meters were being installed.

Tampa Electric Company Legal Counsel, Javi Cuebas reviewed a specific case in South Florida (utility related) that involved the "Stand your Ground" law. Some questions

have arisen regarding the utility company's right to access its facilities when the meter is located behind a fence or gate. More information will come on this topic as much discussion is still taking place.

The last speaker I want to write about was our **Keynote Speaker, Mr. Dan Raulerson, a House Representative in Florida**. He introduced the bill HB 191 which provides additional criminal penalties for utility services wrongfully taken. In Florida, "Trespass with Relation to Utility Fixtures" falls under the State Statute 812.14. Now, with the new writing of the statute, it will follow the monetary side of Statute 812.014 which makes a theft of \$300 or more a felony instead of a misdemeanor. I would encourage my fellow Florida electricity Investigators to visit "online sunshine" to view the bill in its entirety.

...the Revenue Protection Training Conference will be a joint IURPA/SURPA/SCRPA conference to be held in Orlando, Florida the week before Father's Day in June.

Looking forward to 2014, the Revenue Protection Training Conference will be a joint IURPA/SURPA/SCRPA conference to be held in Orlando, Florida the week before Father's Day in June. As President for SURPA, I look forward to working with the IURPA Board in bringing you, our members, a training session that provides value, resourceful information and knowledge, and fun that you might not have received anywhere else but in Orlando, Florida.

Hope to see you at the 2014 Training Conference.

Remember safety, and always treat others as you would like to be treated.

IN CHANGING TIMES - HOW SHOULD WE ASSIST IN DRAWING THE ROADMAP AHEAD

BY RENS BINDEMAN SARPA TECHNICAL ADVISOR

Utilities worldwide are engaging in different levels of new technological advancement, but one thing that is unanimous between all of this, is the need for a roadmap to effectively combat further revenue losses and recover already lost revenue.



Rens Bindeman

The Southern African Revenue Protection Association (SARPA) has managed to reach all its goals for the past year namely 2013. Outgoing President Mr. William Olivier has reported back at the recent Convention in Mosselbay, South Africa that he hopes that the Association will go from strength to strength in the future and build on its past strategies, in order to assist utilities worldwide to minimize their revenue losses.

Since the changing of the Associations name from the “South African to Southern African Revenue Protection Association”, its position in the continent has really become more prominent. The idea of incorporating more African Utilities into the organization has been given a huge boost and countries like Zambia and Tanzania have indicated that they would be looking at joining the Association as soon as possible. Since SARPA focuses on all the revenue loss issues within Utilities namely electricity theft, water losses, financial credit control processes and remedial actions, data fraud, unsafe leads and non-ferrous metal thefts, (more commonly known as copper theft), it is very well positioned to assist such Utilities in order to effectively minimize their losses.

Over the past year SARPA has once again excelled in the field of the combating of non-ferrous metal theft, by becoming one of the major role players in developing the South African Police Services training course on this threat to Utilities. After the completion of the training manual in April 2013, we have been involved in finalizing the roll out of the new course by presenting part of the “pilot course” in August and in the near future we will also take part in the “train the trainer” program.

With regard to operational Revenue Protection processes we in Southern Africa have clearly developed to a stage where we could handle about any threat or challenges coming our way. This effort has not gone unforeseen and the level of our experts in this field is clearly appreciated on an international level, as they are regularly invited to do presentations and facilitate training courses worldwide.

We have attended the Metering Central and Latin America Conference several times in the past few years. On each occasion we were asked to do two presentations in different streams of the Conference, on separate issues related to revenue loss management processes. The praise we have received on every occasion for these presentations are really amazing. This

indicates the versatility of Revenue Protection experts and the huge respect other professionals in Utilities and Government organizations have towards us, for what we are achieving worldwide to assist Utilities in becoming more sustainable.

Just for that reason we in SARPA have embarked on a venture to develop the “Revenue Recovery Toolkit”. It seems that most Utilities in Africa do not know where to start analyzing the extent of their losses, as well as identifying processes to recover such losses. The main goal of developing this toolkit is therefore to find an easy way of analyzing the reason for revenue losses within utilities and identifying workable processes to recover such losses in the shortest possible time.

It is a well known fact that Consulting firms worldwide asks mega bucks to perform such a task and therefore the Utilities in Africa who are close to bankruptcy or already “under administration” cannot afford such a service.

During the pilot projects we have in the past supplied the experts from SARPA to manage the analytic processes, but we soon realized that this would not be feasible across the entire Southern African Region. We therefore embarked on a venture of changing it into a “web based” tool that will be made available to our entire member Utilities. The goal would be for the Utilities to perform a self-diagnostic process and then determine their level of expertise in minimizing losses by obtaining a certain “Revenue Protection Grading”. From the results they would be able to pick from a list of solutions for their specific “grading” what processes could be implemented to address their specific shortcomings.

Once this level has been reached, the Utility Executive should be approached to decide whether they would like to embark on establishing their own “in-house” Revenue Protection Unit or out-source the application partially or in total. The option will then be available to them to request SARPA to provide further guidance in this regard or provide a type of advisory or training service.

Revenue Protection professionals in Africa are on a constant learning curve with the introduction of smart metering technology in the Region.

At our annual Convention in June 2013, both international and local speakers highlighted the fact that the implementation of smart metering is placing new responsibilities on Revenue Protection personnel. Some of the main issues that are still not clear to Revenue Protection Managers are the different processes of testing these meters and the threat of Cyber attacks. It also highlighted the fact that the methods used to introduce such systems are often not “above board” or clear to those that are required to manage the implementation of these new processes.

During interaction with Utility members in Southern Africa, it was noted with concern that smart metering projects were

initiated right, left and center by entities who do not understand the dynamics or costs involved with the introduction of a “smart grid”. These could be anything from a “Task team” (consisting of non-technical staff members), to a single Executive, a politician or even the Regulator. This is really a concern, as projects are hastily completed by outside Consultants (mostly from other continents) and Utilities are left with all the problems of effectively integrating data, as well as financial and technical systems. Some Suppliers were fired by Utilities due to non-performance and within no time they have found other Utilities, where they are now implementing the same systems.

It seems there are no set standard of checking on pilot sites or previous projects to determine the success rate of the systems / hardware. It is therefore a challenge in itself to educate Utility representatives through out Africa not to accept any new metering system on face value only. There should be an extensive study done of previous projects, or in the case of a new system, only a pilot project should be authorized.

The pressures put on Utility Officials by Politicians, Government bodies and Regulators are the most worrying aspects at this stage from a revenue protection perspective. It is noted with concern that officials are mostly not in any position to refuse instructions from these entities, to implement new advanced metering systems. This practice of course leaves an open door for corruption to take place and in a few of the projects where we have interacted with those involved from a revenue protection viewpoint, they suspect “something funny is going on”.

At this point there is not much we can do to prevent these type of actions, other than highlighting best practices and developing standards and guidelines that could be utilized to evaluate present processes and assist Utilities to make better choices in the future.

On a lighter note we have managed to apprehend members of an extensive crime syndicate who specializes in Electricity theft along the length of the South African Coastal area. It has been established that the kingpin is in jail; from where he selects and train new “operators” to perform these illegal acts. They tell consumers that they are fitting an “energy saving device” and the bypasses the meter. Once the “device has been operating for some time they return and ask for a second “penalty amount” because it has worked so well. The one operator was found in possession of a list of “11 Rules” which he had to follow: - The most interesting ones noted that one should never trust a drug addict, try not to lend any money to anyone (note - try), never do any job on time that a client has arranged (always on your own time) and always make sure the power is off (no matter what)!

It is clear that Revenue Protection professionals will have their hands full in the next few years to ensure that new metering development do not prove to be counter productive to Revenue Protection Processes. According to recent World Bank findings, smart metering projects worldwide have generally led to a reduction in revenue losses. So we do not have to fear the end result, but it is rather in the planning and introduction phase of smart metering projects that the Revenue Protection Managers must stick up their hands and get involved in developing a roadmap for this long new journey we are all embarking on!



REVENUE ASSURANCE FORUM – BERLIN, JULY 2013

BY ITZICK MICHAELI, REVENUE PROTECTION MANAGER, ISRAEL ELECTRIC CORP.

Throughout the last 20 years and more, an extensive activity was performed, regarding Revenue Protection of utilities, as part of IURPA's mission. Continuous efforts to involve European utilities with IURPA activities, unfortunately failed.



Itzick Michaeli

The general feeling was, that the protection of revenues that are lost to theft of electricity, is not the major concern of the European power utilities, since the losses are loaded on electricity rate payers, with no significant objection of the regulators and customers.

Therefore, I was quite surprised, to receive a telephone call from the TBM Group, inviting me to attend a Revenue Assurance Forum in Berlin, on June 2013.

Attendance at the Forum, promised to enable the attendees to benefit from:

Attending this premium Forum will

- Maximize Revenue from current operations
- Reduce bad debt risk by providing sample based debt billing analytics
- Minimize revenue leakage, identify and manage risk areas
- Engage customer in the smart meter roll out for long lasting customer relationship
- Recovering revenue by managing all control points
- Control the data flow to certify and increase revenue

Browsing the list of topics and participants, clarified that Revenue Assurance is a weighty issue. It's not only about defending the utility's income from theft of electricity and gas, but it's also necessary to activate a comprehensive risk management throughout the entire organization, aiming to prevent the leakage of revenues, assure cost savings and also make certain that maximum revenues will be collected by the organizations, at this era of tough competition, regulatory pressure, and processes at different stages of progress regarding the rollout of Smart Grid and Smart Metering.

Conference participation goals were as follows:

- Bringing up to date information in the field of loss prevention, maximizing income and risk management.
- The companies learn from the experience of coping with similar problems, and some of which are already in transit towards "Smart Grid" and "Smart Metering"
- Networking with peer Assurance / Income Protection electricity companies throughout Europe.

During the two day conference, representatives of the European electricity and gas companies, and representatives of companies with expertise in a variety of computerized process analysis presentations, presented various topics.

A few emphases:

1. The Transformation that occurred at the telecommunications world, should serve as an example to energy infrastructure companies, with a very high respect to control processes that should be aimed at ensuring and protecting the Companies income.

2. The strong regulation enforces new arrangements, and the energy companies will not be able to escape from taking full responsibility for stolen electricity & gas.
3. The customers are at the center, and customer's loyalty is critical for the survival of the companies.
4. Smart Metering is already on its way, but there is still wavering in most European countries, regarding its implementation.
5. Smart Metering is an excellent tool for exposing power theft, but cannot prevent it.
6. Complex processes and computer systems have been added in order to require the existence of analytical tools and control processes throughout the corporate chain, aiming for identifying errors that might cause leaks and other costs and losses.

Lessons to be learned:

- Ensuring revenues and preventing losses in electricity and gas infrastructure, is of a great importance, especially in light of the severe regulation, increasing competition in the modern energy market and the development of automation and computing infrastructure, needed for supporting the work processes.
- Revenue Protection is considered to be just one of the Revenue Assurance Pillars.
- Many companies perform various activities for prevention of losses under different settings, and find it difficult to precisely define the work processes.
- There is great variation between countries, regulatory practices, corporate structure and customer characteristics.
- It is necessary to examine whether the company is required to establish a central or decentralized Revenue Assurance body..
- Revenue Assurance is a process, and requires slow and unceasing progress, since the issues and environment are constantly changing.
- Building a vision is necessary, in order to ensure the revenues of the company, and continue leading down the road.
- It is necessary to learn from the vast experience of the telecom companies that already established a comprehensive Revenue Assurance system, which allows them to survive in this highly competitive market, characterized by a steady decline in the prices of services.



IN MEMORY OF OUR JAMAICAN COLLEAGUE MARK MENDEL 2013

I believe that some of us, still remember Mark Mendel, our Jamaican RP colleague.

While connecting with his son, Juno on LinkedIn, I was asking about Mark, since emails I sent him started bouncing back a few months ago. Juno informed sadly, me, that his father passed away at the age of 65.

The first time I got in touch with Mark, was in 2002, when he responded to one of my queries, that was forwarded to the IURPA members. I found out that Mark was an ex-Israeli, and we started to connect and exchange knowledge and information. Since I am quite a curious person and also (as you know) a world traveler, I paid Mark a visit on April 2003. I spent three very interesting days in Kingston, and Mark, serving as JPSCo RP manager, introduced me to the electricity theft methods and the ways to combat losses. We went together into some of the worst areas in town, and I watched with admiration the way Mark and his team handled the people and theft issues.

Mark was born in Rumania and immigrated with his family to Israel. He served 10 years as Israeli Border Police officer, and since 1975 to 1979, worked as a security consultant in Africa. In 1979 mark moved to Jamaica, started a family and until 1994 provided advice and expertise on security, asset protection, risk management, internal and external investigations to corporations, including lawn firms, petroleum companies, and utility companies in Kingston, Jamaica and some other Caribbean Islands.

In 1994, Mark was appointed as Manager, Security/RPD, of JPSCo Kingston, Jamaica. Mark was in charge of security, community development, property management, revenue protection, energy theft, risk management, and asset protection programs with responsibility for designing and implementing electronic security systems, access control, physical security at all JPSCo locations, designing and implementing security policies and procedures, at all JPSCo branches, coordinating activities with security forces, as well as personal protection of corporate executives.

Throughout the years 2003-2004, Mark worked as consultant, for PA CONSULTING GROUP Washington, DC., and provided consulting services I&D project, and served as the Deputy General Director for the PA Consulting/USAID management project in the Republic of Georgia, Caucasus. Mark returned to the USA, and worked for 2 years in Miami Florida. On 2006, Mark started to work at some very dangerous parts of the world, He worked for USAID and the World Bank at Kosovo and then at Kabul Afghanistan, until 2008.

I had the chance to spend some time with Mark, while he was visiting his family Israel. We were discussing and planning to invite him as a speaker to one of our RP meetings, but unfortunately, that didn't happen.

May Mark rest in peace.

Itzick Michaeli

LOSS REDUCTION PROGRAMMES

By MIKE MENDEL

Of the 24 countries in the Caribbean, Jamaica is the largest English speaking nation with over 2.8 million people. In that country, electricity is provided by the Jamaica Public Service Company (JPSCo) for a customer base of over 500,000. In 2001, the Jamaican Government divested 80% of JPSCo's shares to the Mirant Corporation of Atlanta in the USA.



Loss is an issue for electric utilities everywhere and the Caribbean is no different. Common loss causes include meter tampering, meter by-passing and illegal use of electricity. This occurs where unemployment is high and the standard of living is low.

The JPSCo has found creative ways to combat losses in these areas. Working in partnership with communities, the com-

pany is well recognized for its involvement with community projects. These range from school feeding programmes, support for education through the donation of computers and scholarships, disaster welfare assistance and assistance to community sport. In addition,, the company has introduced a flat rate to some communities where illegal use of electricity was common. The results have been encouraging.

It is my hope to form a Caribbean branch of the IURPA. Already, IURPA members are helping to design a Caribbean Union of Revenue Protection Association internet website. It will be linked to the IURPA site.

If you have an interest in working together to better address our common problems and would like to join the CURPA, please contact me a mmendel@jpscocom.



Mike Mendel

REPRINTED FROM IURPA APRIL 2003

HONEY, I HAVE JUST WON THE AUSTRALIAN LOTTERY! OR UTILITY SCAM USING GREEN DOT/RAPID LOAD MONEYPAK CARDS

BY CLIFFORD M'SADOQUES, UNITED ILLUMINATING (UI), ORANGE, CT

We have all heard of the many countless scams & schemes in our society of people being duped of their hard earned money\$. Some so ridiculous they make us laugh and some so tragic they make us wonder how mean people can be to the unwary trusting sole. Master showmen P.T Barnum quoted "there is a sucker born every minute" and scammers look to see how they can take advantage of weaknesses to find a victim target, sometimes by luck and/or by skill of the tongue. New scam activities appear to be ever increasing in alarming frequency, using and hiding behind smarter technical knowhow, Internet technology and even attacking us from foreign countries. Our utility customers have been added on the target list! Scammers have discovered the vulnerability of our customers who are behind in their bills, using scare and bully tactics to steal money from them. What I also find horrifying... the customers believe that these devious scoundrels really work for our companies!



Clifford M'Sadoques

For several years and nationwide, utility companies and here at UI, we have been receiving multiple complaints from our customers about telephone calls from callers identifying themselves as UI employees, threatening the customer that they are behind in paying their bill and that they must quickly pay a sum of money to them or "we will shut you off in the next hour" and "the truck is on the way"! They will advise the victim to immediately place cash into a temporary debit card found at Walmart, CVS or Wal-Greens to pay their service bill. This is called the Green Dot Card scam that also have other similar card loading names like Rapid Load, MoneyPak, Paypay, Visa, Master Card... all prepaid debit cards. (Note: There are 60,000 USA retailers that sell these reload prepaid cards).

THE START UP KIT:



Most scammers we have identified are using the MagicJack telephone service, by purchasing a \$40 - \$70 package that allows for long distance and International calls. Simply plug this device into the telephone wall jack or computer anywhere in the world and start making unlimited calls. You can purchase MagicJack at many fine stores, malls, the

Internet and even on EBay. If you purchase this item in your State, you may even receive a telephone number with the proper area code making it appear as a local number. The MagicJack registration form is usually filled out with inaccurate information about the person and address applying for service. The caller ID and IP can be easily be disguised, cloned or "spoofed" to show a false ID. Many scam calls have been identified being made from the Caribbean, Eastern Europe and Nigeria. With existing International laws, this makes it difficult or impossible to identify the criminal, track the money and stop or arrest these scammers.

MODE OF OPERATION:

The scammer obtains names, addresses and telephone numbers in the area they want to scam, by Internet search sites, Skype, business searches or a telephone book. They can determine the utility service in the area by again searching the Internet. The scam caller uses the utility name, declares they are an employee from the company and begins the conversation by stating the victim or business is behind in their payments. They try to cause stress/panic by using an urgency to act, "do it now" so that the victim has little time to think or talk to anyone else before sending the money. If the victim causes any resistance or asks any questions, the scammer will increase the level of verbal threats, intimidation, trickery and mind games. "We will shut you off in an hour" or "the truck is on its way now"! We found that they have profiled/targeted residential minority groups (possible more trusting, language difficulty, easily intimidated or less argumentive) and also targeted businesses that must keep their business uninterrupted, need refrigeration, heating or have food spoilage issues.

IF YOU DON'T SUCCEED, TRY TRY AGAIN:

The scammer will make numerous calls in a day with most calls failing. The scammer only needs a few victims to make substantial amounts of money. When they contact a victim it may be a matter of luck they find the vulnerable victim that is behind in their payments, they may then guess an amount that would be under the total balance owed and make it appear they know everything about their service history. If the scammer over guesses the amounts owed, they may then state that the higher balance is the new current bill or with penalty fees attached. Many times the victim will tell them the total balance owed which only aids the scammer to be more credible. If the target victim is not behind in their bills, suspicious, or challenges the scammer for account numbers, exact amounts owed, the call ends in failure. I have interviewed several victims/complainants and have not found any evidence that the scammer had the exact owed balance amount or any access to the account! This eliminates issues with inside employee problems, business accounts, US Postal mail theft or dumpster diving.

THE CARD:

The scammer will give directions to immediately go to Wal-Mart, Wal-Green or CVS and fill a charge card (cash only) with the agreed amount\$. The victim is then instructed to call back a telephone number (usually a MagicJack number), advise them of the card ID number so they can place the money into their account balance. However, this allows the scammer to immediately withdraw the money and RUN!



The MagicJack Company has been cooperative when advised of the scam telephone number and will cancel the telephone service for us. MagicJack has advised us that the locations of the calls were made from foreign countries and that the telephone number had numerous calls per day. Most victims have stated the caller had “foreign accents”, describing them sounding like they were from the “Caribbean Islands”. MagicJack will not give detail information of the IP location without a subpoena or search warrant.

OFFICIAL INVESTIGATION:

Stopping this scam and crime is beyond utility companies, local police, sheriff or state police control. I have been advised that the Federal Trade Commission and FBI have ongoing cases involving this type of scam/crime and are working on changing laws pertaining to this distant crime committed in foreign lands. However, their main focus is not utility fraud but the domestic & foreign extremist groups using the untraceable pre-paid cards, transferring undetected large amounts of money out of the country to fund training and to purchase weapons/supplies.

NEED TO PUBLICIZE & INFORM OF THE SCAM TO CUSTOMERS:

We have had some published warnings about this scam in the past but we are at the mercy of the news media on how much of a warning they publish if they publish at all. In addition, there has been discussion to place fliers in the bills and also warnings on the actual bill itself. It still comes down to our customers being vigilant and cautious of anyone calling for their money.

HAVE WE HEARD OR HAD THIS HAPPEN?

By WAYNE WOHLER- LOS ANGELES DEPARTMENT OF WATER AND POWER

The revenue protection person deal with the utility companies “valued” customer’s in the field or on the phone. We The revenue protection person deal with the utility companies “valued” customer’s in the field or on the phone. We know our job is a serious one but some things can bring a wry smile to us crusty investigators. Here are a few of the gems from our customers:



Wayne Wohler

1. “Gee, I did not know my bill was delinquent”. (This is being said as you are at the front door and you see the customer red delinquent notices are in their hand).
2. “I don’t know the meter got like that?” when asked about an upside down meter.
3. “What hole in the meter?” As you have already taken picture with a wire or stick inserted to stop the meter and the customer goes over to the meter and removes it in your presence.
4. “All I know is the guy who installed the air conditioning said this is a real energy saving model” Yes it saves on the electric bill when you find it wired ahead of the meter!
5. “You know I just never thought you guys would actually check the meter” When confronted with information of tampering found with the service.
6. “There is no way I could have used that much!” This response almost always comes following the issuing corrective billing and investigation expense charges.
7. Having found an electric meter upside down at an elderly gentlemen home and you announcing entry into the yard. The person still attempts to go over to the meter to start to correct the meter by himself. This occurs even though you have told him to leave the meter alone.
8. “What do you mean I am going to jail?” Yes people it is a crime and you can go to jail!
9. “Water and electricity are god’s creation and should be free!” My response to this statement is perhaps god created water and electricity but it is the utility company who measures and delivers it to you and that is what you are paying!
10. Something out of America’s dumbest criminals: When checking a possible fraudulent application to determine if this is a new customer they present a driver’s license issued a couple of years ago with the same residence as the location they are now claiming to be new!

So these are just of few from our company. I am sure you all have even more. Please put them down and send them in so we can all appreciate our customers!

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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-three 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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