



2010 INTERNATIONAL UTILITIES REVENUE PROTECTION ASSOCIATION Benchmarking Survey Results Questions & Answers

See Participating Index for
Company Name

What type of Utility? 26 Companies

- Electric only: **12 or 46.4%**
- Gas only: **1 or 3.8%**
- Water only: **1 or 3.8%**
- Electric and Gas: **7 or 27%**
- Electric and Water: **1 or 3.8%**
- Electric and Other: **1 or 3.8%**
- Electric, Gas, Water, and Other: **1 or 3.8%**
- Electric, Gas, and Other: **1 or 3.8%**
- Electric, Water, and Other: **1 or 3.8%**
- Electric, Gas, and Water: **0**

Meter Installations (Customer Base)? 26 Companies Total: 39,484,133

- Electric: **31,049,374**
- Gas: **5,467,069**
- Water: **422,621**
- Other: **2,545,069**

Does your company employ AMR or AMI? 25 Companies

- Yes: **21**
- No: **4**

What type of AMR or AMI? 21 Companies

- A. Drive By only: **7 Companies**
- B. Cellular only: **1**
- C. Microwave only: **0**
- D. Fixed network only: **4**
- E. Manually read only: **1**
- F. Other: **0**
- Cellular, Fixed Network, Manually Read, and Other (Power Line Carrier): **1**
- Drive By, Cellular, and Manually Read: **2**
- Drive By, Fixed Network, and Manually Read: **1**
- Drive By and Manually Read: **2**
- Drive By, Cellular, and Fixed Network: **1**
- Drive By, Fixed Network, Manually Read, and Other (Energy Axis by Elster): **1**

Service Territory Make Up? 26 Companies

Operate in only one state: **18**

Operate in several contiguous states: **6**

Operate in one country: **1**

Operate in one city: **1**

Number company employees? 26 Companies Total: 111,181

Range: **300 - 26,000**

Does your company have a Revenue Protection Department? 26 Companies

Yes: **24**

No: **2**

Area of company Revenue Protection reports to? 26 Companies

A. Customer Service only: **12 Companies or 46%**

B. Metering Services only: **5 or 19%**

C. Corporate Security only: **2 or 8%**

D. Legal only: **0**

E. Credit and Collections only: **2 or 8%**

F. Billing only: **0**

Customer Service, Legal, Credit and Collections, and Billing: **1 or 3.8%**

Customer Service and Credit and Collections: **1 or 3.8%**

Metering Services, Legal, and Billing: **1 or 3.8%**

Security and Metering Services: **1 or 3.8%**

Other (Marketing): **1 or 3.8%**

Number employees in Revenue Protection? 26 Companies Total: 449.5

Management: **41.5**

Investigators: **158.5**

Office Support: **224.5**

Others: **25**

Investigator duties assigned? 26 Companies

Geographically only: **5 Companies**

Handles all types: **9**

Geographically and Handles all types: **7**

Geographically, Residential/Commercial, and Handles all types: **1**

Geographically and Residential/Commercial: **2**

Geographically, Residential/Commercial, and Others: **1**

Geographically, Residential/Commercial, Type of Service, and Handles all types: **1**

Percentage Investigators classified as Union? 24 Companies

100%: **8 Companies**

50%: **1**

0%: **15**

Which work activity is included in your Revenue Protection group? 26 Companies

- A. Tampering/Theft only: **1 Company**
- B. Fraud/Identity Theft only: **0**
- C. Defective Meters only: **0**
- A, B, and C above: **10**
- Tampering/Theft and Fraud/Identity Theft: **5**
- Tampering/Theft and Defective Meters: **6**
- Tampering/Theft and Other (Customer ID Verification or Unmetered Service in general): **2**
- Tampering/Theft, Defective Meters, and Other (Company errors, Incorrect Rates, etc); **2**

How are Leads brought to your attention?

Customer Service Contacts	Unbilled Usage Report
Service Department	Tamper Flag Report
Reporting Proactive Data Mining Reports from AMI	Smart Meter Alarms
Employee Tips	Website
Phone Hot Line	Inspection Inquiries
Meter Readers	3 rd Party Analytics
Customers	Dunning Follow-up
Law Enforcement	Watching payments by check
Billing Department	Low Consumption Reports
Representative Sampling	Local safety groups
Field Employee Reports	Code Enforcement
RP Experts Field Survey	Abnormal Meter Condition Report
Email	Vendor analysis

Are Investigators allowed to remove meters? 26 Companies

- Yes: **22 Companies**
- No: **3**
- Sometimes **no** by Union Agreement: **1**

Are Investigators allowed to remove Jumpers or Bypasses? 26 Companies

- Yes: **22 Companies**
- No: **3**
- Sometimes **no** by Union Agreement: **1**

Is the wiring, meter socket, and/or piping company owned? 25 Companies

- Yes: **6 Companies**
- No: **18**
- Depends upon installation (URD vs OH, Residential vs Commercial): **1**

How many investigations were performed in 2008? 25 Companies Total: 184,819

- Range: **21 – 50,988 (24 Companies)**
- No Record, but 30 filed with Law Enforcement: (1)**

Total Cases confirmed in 2008? 24 Companies Total: 87,084

- Residential: **42,156**
- Commercial/Industrial: **6,733**
- Combined: **38,195**

How many investigations were performed in 2009? 23 Companies Total: 242,056

Range: 350 – 70,085

Total Cases confirmed in 2009? 23 Companies Total: 96,650

Residential: 44,746

Commercial/Industrial: 9,703

Combined: 42,201

What was the department's total billing in 2008? 21 Companies Total: \$66,184,894

Residential: \$13,434,891

Commercial/Industrial: \$19,533,704

Combined: \$33,216,299

What was the department's total billing in 2009? 22 Companies Total: \$77,875,505

Residential: \$17,272,846

Commercial/Industrial: \$20,029,163

Combined: \$40,573,496

Return on Investment 2008? 16 Companies

Varied as follows: \$4 to 1, 60%, 1, 1.5, 1 to 1, 71.84% (\$4.79/1 Total), \$10/1, \$6/1, 41%, \$7/1, \$4.27:1, \$4.23, 1.8%, \$8.76, .8, and 688%.

Return on Investment 2009? 16 Companies

Varied as follows: \$2 to 1, 59%, 1, 1.015, \$.85/1.00, 63.29% (\$5.15/1.00 Total), \$10/1, \$8/1, 20%, \$7.54, \$2.59:1, \$4.26, 1.9%, \$7.53, 7.3, 803%.

Percentage of time Revenue Protection Investigators spend on the following?

Investigation	50%	Court Appearance	2%
Backbilling	9%	Sealing Program	2%
Calculation, Administration	10%	Promotion Prepaid Metering	0%
Employee Training	3%	Slow or Dead Investigation	12%
Equipment Connection	2%	Meters not in Route	.5%
Case Preparation	7%	Other	2.5%

Does company recognize Future Annualized Gain or Restored Revenue? 24 Companies

Yes: 11 Companies (Includes 1 called "Secured" and 1 called "Protected")

No: 13

Does Future Annualized Gain or Restored Revenue apply to? 11 Companies

Tampering only: 2 Companies

Defective Equipment only: 0

Tampering and Defective Equipment: 9

Indicate the method of calculation for Future Annualized Gain or Restored Revenue?

- 8000 kWh/year multiplied for a 5 year period.
- **Actual consumption (or increased consumption). Accounts are examined >3 months after correction to validate if they are still active and paying (not disconnected or subject to disconnect).**
- 24 months protected.
- **Amount billed divided by the number of days billed times 365.**
- Calculate the loss by determining the amount of diverted energy in kwh daily average, then calculate into a dollar amount for 1 year.
- **New annual bill less previous annual = net increase. We claim increase.**
- Annualized losses avoided (ALA) = total dollars billed/total days = daily loss. Daily loss is multiplied times 365.
- **Annualized for a 3 year period.**
- Average monthly bill-up amount times 12 months at current rates.
- **Per day average of the loss times days in the year times cost of energy.**
- Depends on the type of problem (ie. Wrong rate, zero consumption, meter installation problem). Basically try to estimate the potential loss on an annual basis.
- **For periods of loss less than 1 year, extrapolate the losses for a 12 month period. For losses one year, take a representative 12 month period.**

For Gas, Water, and Other utilities, is there a formula for calculating Restored Revenue?

Yes: **4 Companies**

*New annual bill less previous annual bill = net increase. We claim increase.

*For Gas, Annualized for a 3 year period.

*For Water, Annualized monthly bill-up amount times 12 months at current rates.

*For Gas, daily average of the loss times days in a year times cost of energy.

No: **2**

How does Revenue Protection measure success? 26 Companies

- Actual revenue billed only: **4 Companies**
- Future Annualized Gain or Restored Revenue factor only: **1**
- Number of Investigations where losses are stopped only: **0**
- Actual revenue collected: **1**
- All 4 above: **4**
- Actual revenue billed and Future Annualized Gain or Restored Revenue factor: **3**
- Actual revenue billed, Number of Investigations losses stopped, Actual revenue collected: **7**
- Actual revenue billed and Actual revenue collected: **1**
- Actual revenue billed, Future Annualized Gain or Restored Revenue factor, and Number of Investigations where losses are stopped: **1**
- Actual revenue billed, Future Annualized Gain or Restored Revenue factor, and Actual revenue collected: **1**
- Future Annualized Gain or Restored Revenue factor, Number of Investigations where losses are stopped, and Actual revenue collected: **1**
- Number of Investigations where losses are stopped and Actual revenue collected: **1**
- Other. Success is measured on time. Specialists have 60 days to complete approx. 200 accounts per month. Dollars identified is used as a matrix, not a goal. This eliminated the Specialists from concentrating on only the large dollar cases: **1**

How far backward (in months) can your company bill for found revenue? 25 Companies

From tampering: **From proven occurrence**, Indefinite, but need to prove, **7 years**, 5 years, but evidence decreases in value through the years, so we bill within 10 working days, **No limit (2 Companies)**, As far as records permit, **When tampering began**, All the way back, **Whatever we can prove**, Back to date proven, **84 months**, As far back as the theft occurred, **Date of tamper**, Unlimited (3 Companies), **All**, 12 months, **6 years**, To determined start date, **As long as billing records support**, 3 years, more with PSC approval, **As far back as theft was identified**, Justifiable Period.

From Defective meters and improper wiring conditions: **1 year (2 Companies)**, 48 months, **3 months**, 5 years, but evidence decreases in value through the years, so we bill within 10 working days, **4 years**, 12 months (4), **6-36 months**, 2 years, **90 days**, 36 months, **24 months**, 6 months (2 Companies), **Actual period**, Ct. 12 months, Ma. 6 months, **No limit**, 1 year, more with PSC approval, **Residential 6 months**, **Commercial as far back as identified**, Unlimited, but we negotiate, **Unlimited**.

Does your company offer payment arrangements on theft cases? 25 Companies

Yes: **20 Companies**

No: **5**

What legal context allows your company to bill for meter tampering? 26 Companies

- A. Federal Law (s) only: **1 Company**
- B. State Law(s) only: **1**
- C. Regulatory Framework only: **5**
- D. Civil Law(s) only: **0**
- E. All 4 above: **1**
- F. Other (Electricity Act & Company Rate Schedules & Policies): **1**
 - Federal Law(s), State Law(s) and Civil Law(s): **1**
 - Federal Law(s) and Civil Law(s): **1**
 - State Law(s) and Regulatory Framework: **6**
 - State Law(s) and Civil Law(s): **3**
 - State Law(s), Regulatory Framework, and Civil Law(s): **4**
 - State Law(s), Civil Law(s), and Other (Municipal Laws): **1**
 - Regulatory Framework and Other (Distribution Code): **1**

Describe circumstances under which Energy Theft is a Felony? 23 Companies

>\$800 theft, **Amount over \$400 of theft or by making an illegal connection to one of our lines**, Always a felony, Safety and growing hemp make it more serious, **Damaging Israel Electric installations–5 years-Felony. Tampering for stealing electricity–3 years-Offense**, There is no felony charge, only a misdemeanor of tampering with a utility, **Losses >\$1,000 becomes a D Felony. >\$5,000 = C Felony. >\$10,000 = B Felony (Grand Larceny) >\$500, Over \$750 Theft 1 and \$10,000 aggravated**, Determined by Police, **Theft totaling >\$500**, Repeated illegal connections resulting in the use of unmetered service and/or lost revenue >\$500, **Theft component reaches \$300 and over (3)**, Theft >\$2,500, **\$5,000**, Anything over \$450, **Grand Larceny charges w/minimum \$ amount**, theft of services > \$1,000, **>\$1,000, >\$250, Doesn't apply in Canada, Police and Crown may if evidence warrants**, NJ criminal law doesn't use the term "felony". The closest equivalent would be whether or not the offense is indictable. Thefts of 4250 or more are indictable (4th degree crime), most cases fall in 3rd degree (over \$500) crime. Amounts under \$250 are non-indictable disorderly persons offenses.

Does your company prosecute for theft? 25 Companies

Yes: 20 companies

No: 5

How many prosecutions were filed in 2008? 10 Companies Total: 3756

Range: 1-2010

*Note: 7 Companies between 1-47 and 3 Companies between 138-2010.

How many prosecutions were filed in 2009? 14 Companies Total: 3807

Range: 3-2010

*Note: 10 Companies between 3-40 and 4 Companies between 76-2010.

Success rate for prosecutions in 2008 and 2009 combined? 26 Companies

Range: 50-100% (16 Companies)

- *Note #1: 15 Companies between 90-100%
- *Note #2: 1 Company had 1 case lost and the other is still pending.

After tampering found, account flagged in Customer Information System? 25 Companies

Yes: 20 Companies

No: 5

Do you notify customer or occupant by? 24 Companies

- A. Door hanger only: 2 Companies
- B. Letter only: 9
- C. Tag on meter installation only: 1
- D. Other only (Law Enforcement contacts): 1
- Door hanger and Letter: 5
- Door hanger, Tag on meter: 0
- Door hanger, Letter, and Other (Bill in person): 1
- Door hanger, Tag on meter, and Other (Contact by phone): 1
- Door hanger and Other (Investigator leaves business card): 1
- Letter and Other (In person): 1
- Letter and tag on meter installation: 1
- Tag on meter and Other (Manual Bill): 1

Does your company charge or assess a tampering fee? 25 Companies

Yes: 17 Companies

No: 8

How much is the tampering fee? 26 Companies

Set fee amounts: 18 Companies

\$200, \$16 (Nothing significant, considering approaching Legislators), \$75 (or actual cost of investigation), \$125, \$75, \$90, \$75, Field Collector \$100.18/hour Meter Servicer \$105.53/hour Troubleshooter \$238.22/hour, \$250 (plus associated costs), \$65, \$150 (1st occurrence) \$200 (2nd occurrence) \$250 (3rd or more occurrence), \$35.

Other comments:

1. Attempting to get \$500 flat fee from Regulators.
2. Whatever time, Legal, and materials are spent.
3. Hourly rate times hours spent.
4. Per hour investigation.
5. Actual expenses incurred.
6. Varies based on loaded hourly labor rates of all personnel involved. Typically, several thousand dollars.

Does your company charge for meter tests or meter damage? 26 Companies

Yes: 24 Companies

No: 2

How much for meter tests or meter damage? 26 Companies

Set fee amounts:

\$45 Test \$40 Meter replacement \$165 for checking & verifying a tamper in the customer electric installation, **\$61.60 single phase \$81.70 three phase**, \$100, **\$102**, \$500-600, **\$15 test and \$47 damaged meter**, \$60, **\$75**, \$20 Electric test \$35 damage \$20 Gas test \$63.50 damage \$10-45 Water test \$29.23 damage (5/8 inch meter), **\$10**, \$210.

Other comments:

1. The cost of the meter.
2. Actual cost of the meter.
3. Around 500 Euros.
4. Meter damage cost varies to type of meter.
5. Actual cost of equipment & labor (loaded).
6. Actual costs involved.
7. Per hour based on investigation.
8. Depends on type of meter.
9. Anywhere from \$100-1,000+.

Do you install locking hardware? 25 Companies

Yes: 22 Companies

No: 2

N/A: 1 Comment, we use A Bases.

Do you charge for locking hardware? 23 Companies

Yes: 12 Companies

***Note: 6 of those that said yes include comments that if previous lock was damaged.**

No: 11

Does your company have an incentive program? 26 Companies

Yes: 12 Companies

No: 13

***Note: 1 yes (in ACE/DPL) and 1 no (in PEPCO)**

Does your company feel the incentive program is working?

Yes: **9 Companies**

No: **1**

Comments:

- **It works mostly with employees that are concerned with the theft issue and look for tampers. A higher payout might involve more employees in reporting suspicions of theft.**
- **The main driver for field personnel.**
- **Ok...field employees only.**
- **It provides some successes although not the majority.**

Describe how the incentive payout is determined?

Comments:

- **For every verified case \$35 (before taxes).**
- **\$50 for a bona fide tampering. 5% of any billing over \$1,000 (unlimited).**
- **Minimum \$13 for basic theft report, 5% of what is recovered for a fraud or more involved theft case.**
- **\$25 up to \$500 for theft and bad order service.**
- **Achieving Corporate & Company established goals.**
- **Small gift cards (\$10) to top 5 informants in each Operation Center.**
- **\$25 for irregular meter conditions, \$50 for TOS.**
- **\$50 confirmed finding + 10% of billed revenue >\$500 up to max. \$5,000.**
- **\$10 gift card for each tip.**
- **Payment is fixed amount regardless of \$ collected.**
- **Set criteria of types of cases that qualify for incentive and flat fee is paid.**
- **\$50 incentive is paid on all confirmed thefts of unmetered gas and is paid regardless of any restitution. If restitution is paid, 10% up to \$2,500 max incentive (note: the initial \$50 payment covers first \$500 collected if any).**

How much revenue in 2009 do you estimate was lost from Theft of Service, Fraud, and Defective Equipment? 17 Companies

\$5M (4Companies), 50M Euros, \$200M, \$300,000, \$3.85M, \$32M, 10-15%, 500M Rupees, 3%, .5-2.5%, \$1.5M, \$4.2M, \$524,000, \$1,540,000.

What % of generation, after line loss, do you estimate was lost? 8 Companies

50%

1%

<1% of Gross sales

1.5%

10-12%

8-10%

2%

.12%

Does your company utilize any outside programs to identify losses? 24 Companies

Yes: **6 Companies**

No: **18**

Specify the outside program your company uses? 6 Companies

Detectent (3 Companies)

Data Raker (for residential and small commercial AMR) and Detectent (small commercial) Third Party Analytics – Detectent

What are the critical issues facing Revenue Protection, both currently and in the future? 22 Companies

- RP needs to stay flexible and on top of technology. Because of Budget reductions, most of us are doing more with less. This makes it imperative that we increase our hit rate and focus on the accounts where revenue is being lost.
- **Smart meters and no more eyes in the field.**
- Economical and public issues.
- **Bad economy and rising cost of living. There is a growing disrespect of the law.**
- New theft related to AMI as well as upper management's buy in that there is a problem.
- **Laws and Regulations that address Identity Theft, fraudulent medical claims. Better recourse in collecting lost revenues.**
- The effect of AMI metering on the industry and the continued growth of ID theft.
- **Learning to leverage the new Smart Meters and making up for the loss of the eyes in the field.**
- Smart Meter tampering. The eyes in the field will be GONE!
- **Economic Crisis, sophistication of tampering, and limited resources.**
- Accurately and efficiently tracking payments made on past Revenue Protection cases to maximize recovery and reporting efforts.
- **Financial support from the company.**
- Proposed regulatory billing restrictions on months of backbilling. Potential AMI installations and concerns with non proven tamper flag applications.
- **Detection, more sophisticated thefts. Also, employee and customer safety.**
- Staying ahead of technology curve and developing productive method of surveying installations.
- **The move to AMI, Smart Grid, and future meter security.**
- The availability of manpower and funds to pursue theft cases and keeping up with new technology will be the major issue for our utility.
- **Pirating meter software to re-program meters without detection or cutting seal.**
- The effective identification and collection of resources, new AMI environment because we won't be there every month which offers other people IT related opportunities to defeat.
- **Economic conditions cost of doing business, and doing more analytics of existing data.**
- The economy and the high cost of technology that could help.
- **Keeping up with technology, automation of Meter Reading (fewer eyes to detect abnormalities) along with increased Reporting Requirements (ie. Data Mining).**