

# Revenue Assurance (electric/gas)

# **Operations Optimizer**

Energy loss due to tampering continues to be a major concern for utilities. Offenders continue to become more sophisticated and are illegally diverting more energy than ever. Whether through relatively simple meter tampering or complex diversion schemes, energy diversion is a public safety concern and can have a considerable effect on a utility's bottom line.

The adoption of smart meters has vastly improved utilities' capabilities in minimizing losses and reducing safety issues. New data from smart meters and other devices can indicate suspicious usage patterns, energy diversions and tamper conditions. This data helps pinpoint and resolve the exact cause of energy that is distributed and not paid for. However, many revenue protection solutions—whether built internally or provided by third parties—can result in slow, time-consuming and manual processes as well as many false positives and unnecessary truck rolls.

With Itron Revenue Assurance, you get a proven, industry-leading solution.

- » Built on the Operations Optimizer solution, which monitors over 40 million meters every day
- » 23 out-of-the-box analytics, which can be tuned and customized
- » Analysis of all utility services: electric, gas, residential and commercial, and all metering intervals

- » Complete case tracking system that supports best-in-class investigation processes
- » Ability to tune analytics based on field results, ensuring the system is ever evolving

	Service Point	Meter	ST	SetDate	DyOp	DrpEvtSc	PatThftSc	RA0UseSc	Post10DyAvg	Latitude	Longitude	
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□ Ø 🕏	1033200001	A1ND301425	E	8/10/2015	2556	792	63	0	0.1	37.16713	43.233695	
□ ☑ 🤊	7487000020	ATCA304346	E	12/5/2016	2746	769	342	0	0.0	37.125857	49.21126	
□ ☑ 🤊	9664000080	A1ND330811	Е	11/15/2016	2486	731	23	0	9.9	37,2073	43.338425	
□ ☑ 🤊	169000070	A1ND330966	Е	1/10/2017	2620	695	72	0	2.6	37,200719	43.30476	
□ Ø 🖸	6990200070	327267	Е	6/14/2017	2730	695		21	0.0	37.208663	43.303998	
□ Ø 🛭	2742699596	A1ND332896	E	12/7/2016	2746	657	307	0	0.0	37.184916	49.360702	
□ Ø 🖸	6287200070	A1ND346956	Е	2/2/2017	2746	620	493	0	0.0	37.205563	43.296817	
□ Ø 🕏	784200020	342124	Е	12/5/2017	2557	600		50	3.3	37.164808	-49.32325	
□ Ø 🖸	959000070	A1ND335991	E	11/3/2016	2415	573	81	0	7.8	37.200356	43.354364	
□ Ø 🖸	4747300050	A1ND329512	Е	9/11/2017	2643	567	20	0	114.5	37.183782	43.254838	
□ ☑ 🦁	5459132915	A2/0043085	Е	4/17/2018	2424	491	43	0	2.2	37.196488	43.291366	
□ Ø 🖸	5490100090	ATCA363655	Е	11/13/2017	2579	490	20	0	59.4	37.330547	49.266524	
□ Ø 🕏	3623200090	A1ND017108	E	9/2/2016	2746	273	475	0	16.5	37.265232	43.268446	
□ ☑ 🤡	3890277384	A1ND336696	E	10/18/2016	2746	258	473	0	46.8	37.203772	49.401179	
□ ☑ 🦁	2741100050	A1ND3583H2	Е	12/15/2017	2548	233	20	0	16.3	37.202903	49.263325	
□ ☑ 🤊	2194000080	A1ND360650	Е	11/27/2017	2565	228	20	0	29.5	37.373947	43.338016	
□ ☑ 🤊	4045574643	A1ND300188	Е	6/10/2015	2746	207	20	0	16.8	37.220311	43.198716	
□ ☑ 🧿	6306200070	A1ND300470	Е	6/15/2015	2746	76	20	0	3.3	37.203748	49.228511	

Figure 1: List of accounts with revenue assurance scores indicating loss condition

#### **FEATURES AND BENEFITS**

Itron Revenue Assurance offers analytics, tools and workflow support to facilitate detecting, investigating and resolving lost revenue.

# **Investigation Tools**

Revenue Assurance offers a plethora of tools to efficiently and effectively manage the revenue assurance process.

- » Simple and complex filters and queries
- » Spatial views of suspects
- » Graphical timeline views showing consumption history and various events
- » Comparisons with like peers



Figure 2: Map of nearby service points

# **Analytics**

Revenue Assurance uses highly accurate, high-granularity data with field-tested detection algorithms.

- » Library of proven analytics developed by data scientists and proven by utilities
- » Ability to customize and tune existing analytics to meet your needs
- » Ability to augment internal data with data from third-party sources
- » Itron data scientist dedicated to extending or creating new analytics

#### **Process Support**

- » Service order prioritization based on several factors such as time that an issue has existed and value of loss to the utility
- » Case management including work flow, work order integration and automated back bill calculation
- » Ability to track case verification by field crews (hit rate)
- » Tracking of recovered revenue, allowing the tracking of program success

#### **DISTRIBUTED INTELLIGENCE**

Available on OpenWay® or Gen™X electric endpoints, Revenue Assurance is enhanced by receiving meter bypass distributed intelligence results. This technique increases the accuracy and speed of theft detection. These results can then be displayed and have workflow and automated actions applied.

#### CONCLUSION

Itron Revenue Assurance is a proven solution that will alleviate safety concerns and enhance revenue. Supported by a deployment methodology that requires minimal utility IT resources and delivers industry-leading analytic methods and easy-to-use tools for analysis and investigation, Itron Revenue Assurance delivers efficiency and value to your operations.

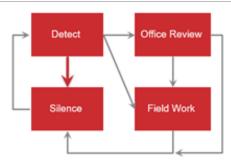


Figure 3: Workflow makes analytic results actionable



Figure 4: From the list view, quickly see load profile without having to open another screen

## **OPERATIONS OPTIMIZER**

The Operations Optimizer solution is used to integrate data from multiple sources and leverage big data technologies to maximize analytic performance and support various outcomes. Leading utilities count on datadriven insights from Operations Optimizer in their daily operations. Operations Optimizer is used by utilities around the globe and analyzes data from over 40 million water, gas and electricity meters, in both AMI and legacy environments, at more than 30 utilities. The Operations Optimizer solution supports many outcomes such as AMI Operations, Network Operations, Revenue Assurance and Meter Temperature Monitoring. Operations Optimizer is available as a hosted solution and is integrated with Microsoft Azure.

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