

# Safer. Reliable. Highest Efficiency.

## EnergyIP® Analytics Foundation

### Make confident decisions using the full potential of your data

#### Go Beyond Meter-to-Cash

MDMs are necessary for accurate and timely billing but there are many beneficial use cases for the data already available. Understanding customers well allows utilities to plan and operate their business more effectively and profitably.

#### Don't rely on a snapshot of statistical samples

EnergyIP Analytics Foundation allows better business planning for rate design and load forecasting by observing the data for the entire customer base rather than statistical samples. More accurate data observed for an entire customer improves every aspect of forecasting.

#### Prove your case to regulators

Utilities often prepare their rate cases for presentation to regulators by describing hypothetical "example" customers. Confidently predict rate impacts for all customers and even list real examples in a rate case with analytics. In addition, utilities can assure regulators that they can identify and reach out to customers who might be disproportionately adversely affected by a planned rate change.

#### Optimize low voltage network visibility and transformer management

Identify which transformers experience overloading, to what degree, and when. Analytics can spot patterns and trends in downstream loads being

served by overloaded transformers.

This makes it easier and more cost effective to implement a variety of solutions to minimize overloading and protect the utility's investment in that transformer.

#### Improve scheduling generation

When short-term and long-term load forecasts are less accurate, utilities tend to need to keep a larger reserve of generation capacity on hand, to meet customer needs and system reliability requirements. EnergyIP Analytics Foundation provides a platform for monitoring, analyzing, and forecasting distributed generation and renewables. As the proportion of more intermittent renewable generation and customer operated distributed generation on continues to grow, utilities face new challenges in scheduling and coordinating generation

#### Keep Customers Motivated

Demand response programs are potentially a powerful tool but rely on customers to act. Improve market segmentation and improve customer programs (energy efficiency, demand response, time-of-use rates), as well as the benefits these programs yield to customers and the utility to be horizontally and vertically scalable with devices and channels to avoid escalating costs associated with unprecedented growth.

#### Increase Operational Efficiencies

Analytics can play a key role in helping utilities get the "biggest bang for the buck" by providing data for planning ahead for such as distribution transformers purchases, reducing emergency truck roles by moving from a reactive to a proactive maintenance model, knowing the appropriate capacity or size of new transformers and understanding generation capacity

#### It's Easy

Abundance of configurations options out-of-the-box allow all users to adapt to changing business requirements easily.

**// It's a new world.**  
The way electricity is produced differs from the past. Clients are buying rooftop solar panels and producing energy. You may not have the right cable for energy to go the opposite way. Being able to facilitate flexible electricity consumption requires you to know your load on the grid in great detail.

Poul Berthelsen  
Innovation Manager, KONSTANT

# Automated • Data Quality • Beyond Meter to Cash • Easy

EnergyIP MDM takes meter data management to the next level with an intuitive, easy to use user interface and going beyond meter to cash. High quality data and reliable automation adds extra ordinary operational value beyond billing into MDM strategy.

## Beyond Meter to Cash

- Reduce non-technical losses
- Detect meter hardware and distribution network equipment failures
- Improve low voltage network visibility
- Detect anomalies and improve responses to public safety issues
- Improve quality of service and customer experience
- Enable customer targeted incentives and campaigns



Save costs



Reduce non-technical losses



Optimize personnel deployment



Pro-active operation management



Flexible tariff system to encourage network sustainability



Low voltage network visibility

## Smart grid analytics for energy management industry based on over 20 years experience

### Know what is possible

EnergyIP MDM users have access to huge amount of data received from the AMI every day and every minute to go beyond traditional meter-to-cash.

- Intelligent decision making to address bi-directional energy flow
- Real time data to apply to analysis and presentations replacing a screen shot from statistical samples of the customer base
- Save money on field operations and asset management: reduced truck rolls, capital investment planning, proactive maintenance scheduling
- Monitor and maintain smart meter performance

### Get Started Easily

EnergyIP Analytics is user-friendly for all users. An open and flexible interface allows data accessibility to many different 3rd party tools and users with different skill sets, needs and requirements

- No lock in and designed for multiple user skill sets
- Intuitive and easy to use web-based user interface for the novice user
- Query interface to export/import to SQL, Excel, Tableau or Jupyter Notebook, etc. for advanced data analysis
- APIs allow direct access to the data for developers who want to write their own data analytics application for customized use cases or user experiences.

### Use Cases Out-of-Box

EnergyIP Analytics is delivered with the most common use case configurations available out-of-the-box. These include, but not limited to:

- Distribution load analysis
- Customer load analysis
- Smart meter event analysis
- Power outage analysis
- Water and gas leakage detection
- AMI data collection analysis



### Published by

Siemens AG 2021

Smart Infrastructure  
Digital Grid  
Humboldtstrasse 59  
90459 Nuremberg  
Germany

For the U.S. published by  
Siemens Industry Inc.  
100 Technology Drive  
Alpharetta, GA 30005  
United States

For more information, please contact:  
energyip\_customer\_support.us@siemens.com

The information given in this document only contains general descriptions and/or performance features which may not always specifically reflect those described, or which may undergo modification in the course of further development of the products. The requested performance features are binding only when they are expressly agreed upon in the concluded contract.