Smart grids for a sustainable future

Given the changes in energy systems, caused by the requirements for renewable and distributed generation source as well as the aging supply infrastructure, Siemens developed answers to the questions faced daily by our customers.

Smart Grid Division from Siemens supports power utilities, network operators, industries, cities, rail operators and others on expansion of transmission and intelligent power distribution, as well as on integration of centralized and decentralized power generation. We provide a full range of products, solutions, and services for protection, automation, planning, control, measurement, monitoring, and diagnosis of network infrastructure.

Find out how the Smart Grid can become a reality with Siemens technology.

www.siemens.com.br/smart-metering
Greater efficiency and data transparency for less loss in power grids

In order to satisfy the growing demand for energy, it is essential to have an intelligent and flexible network infrastructure, intelligent power generation, and intelligent buildings.

Society’s expectations towards utilities and network operators are growing continuously. Energy grids have become more efficient, more flexible, more reliable and more decentralized and they require intelligent solutions for the growing amount of renewable energy being generated throughout the world.

SIEMENS Metering & Communication Services, the leading supplier of smart metering solutions, is responsible for developing energy, water, and gas metering systems for utilities, distributors, and large consumers. The company focuses on MDM (Meter Data Management); outdoor metering; centralized metering of buildings; transformer monitoring; energy balance; fraud detection and delinquency reduction; measurement and analysis of energy quality; and telemetering of big consumers of low and medium voltage.

Complete smart metering portfolio
Siemens mission is to provide complete and innovative metering solutions and for such it offers its most advanced technology, MECE. This software for meter automation and integration of subsystems, the main component of the MDM MECE, is capable of providing, within a single data structure, various elements such as Energy Balance, global online management of all information related to metering and its related parameters, and detection of irregularities. MECE makes all this available for billing and other corporate systems.
Meter Data Management (MDM)
Comprises a metering service platform that allows utilities and big consumers of energy to execute energy balance, irregularity detection, and billing automation operations, integrating metering information with the corporate systems of companies.

AMI (Advanced Metering Infrastructure) is the set of electronic meters that comprise the metering complex of Utilities, coupled with the communication interfaces (remote) necessary for linking this equipment to MDM.

MDM (Meter Data Management) is the set of software and hardware equipment necessary to provide the customer a meter management platform.

Siemens systems allow, in a rapid, reliable, and corporate manner, the development of planning, operation, and commercialization applications capable of adding value and optimizing the service provided to end consumers, improving price, quality, and excellence levels.

MDC Universal
The Meter Data Collector solution can create, edit, and manage measurement data points, in addition to collecting data from mass memory, real-time data (equivalent Pagina Fiscal), and cutting and reclosing of various types and brands of meters.

This system of supervision and control processes was developed to meet the current requirements of connectivity, flexibility and reliability, making it ideal for use in critical systems. With an architecture of network operation in a multilayer system, the software offers a platform for fast application development, high communication capability, and ensured expansion. The solution allows communication with a great variety of protocols and equipment that can accommodate both local systems and those that are geographically distributed.

Over 350 protocols are available allowing communication with a huge amount of control devices, energy meters and protection relays. In addition, new communication drives or interfaces can be developed.

Remote 5.0
The remote RMT5.0 is equipment dedicated to telemetering of large electric power consumers. Its internal software has more than 30 routines to detect irregularities and ensure accuracy and reliability of measurement data for each connected meter.

Totally autonomous and configurable, the equipment automatically sends measuring data, configuration and alarms, eliminating the need to request messages. This feature provides scalability for MDM systems and more efficient use of network resources.
Remote 5.0

The RMT5.0 ensures secure, reliable, and low-cost communication, using encrypted algorithms, protocols with delivery warranty, and data compression. The use of different protocols ensures efficient communication with the most meters in the market and easy integration with many available MDM. This provides a wide coverage with the lowest cost possible. In addition, the equipment can also operate on a transparent mode.

Compact and External Metering Set*
This high-performance tool combats technical losses, energy theft and other frauds. Innovative and pioneering in Brazil, the device redefines the concepts applied in the metering market so far. Measurements, previously made inside cabins and subject to unmanageable and undesired interventions, are now done safely through inaccessible units installed directly on the pole top, at medium voltage aerial distribution grids.

For applications like frontier metering, energy balance and comparative measurements, the compact assembly ensures elimination of losses due to frauds, allows revenue recovery, and eliminates the cost of monthly manual and/or on-site readings. Additionally, it monitors the load 24/7 through MECE metering data management software.

This metering set together with Siemens technology and remote communication system, ensures increased reliability, accuracy in metering data readings, and effective and correct management.

*Equipment manufactured by SERTA

Field Services
Siemens highly qualified and certified teams provide inspection services of consuming units, installation of AMI equipment, commissioning and maintenance of installed equipment.

IT Services
Siemens offers implementation, configuration, support, and maintenance services for servers and systems that comprise the solution. It also performs integration services between MDM and other corporate systems.

Total conformity with environmental standards
In producing its hardware components, Siemens rigorously complies with environmental legislation, prohibiting use of any chemical products hazardous to the environment in its industrial process, be it internally or on the part of third parties.

Remote 5.0

Field Services

Metering Set