

INTELLIGENT NETWORKS FOR ELECTRICAL ENERGY MEASUREMENT FAVORING ENERGY EFFICIENCY

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Intelligent networks for electrical energy measurement (INEEM) are applied both on energy production and consumption sides. The reactive energy and the harmonics without compensation, introduced in the supplying mains by all types of industrial machines diminish the quality of the electrical energy. They are taxed, paid on higher prices and lead to inferior efficiency on common electric appliances. INEEM monitors all these parameters and informs the operators just in time in order to perform adequate actions. Power consumption time breakdown and load profile lances monitoring allows flexible energy outlay prediction for each and every customer. Needless consumptions, such as parallel work of a large number of electric appliances, could be traced, identified and moved in a zone with lower energy consumption prices and supplying mains loading.

The new busyness environment created by the deregulation of the energy market allows INEEM to be used as a tool for power consumption trend monitor. These trends could be used as base for power supply declarations concerning every single hour, 24 hours a day, and 7 days a week. This will inevitably decrease the amount of money paid for electrical consumption.