Interview

"We have several success stories..."

In today's world, energy and demand costs have skyrocketed, and certainly impact any industry's balance sheet. ElMeasure has been assisting the industry with energy saving strategies, helping minimize cost and consumption. The company has emerged as beacon for energy consumers of the 21st century. In an exclusive e-interview with Electrical India, Sam P Cherian, Chairman of the company, is fielding questions from PK Chatterjee on Energy Management Systems. Excerpts...

Q How is the demand for Energy Management Systems (EMSs) increasing in India?

A The rising cost of energy is causing organizations to evaluate smart ways of saving energy. Energy suppliers are increasingly penalizing organizations that use inefficient assets or devices with a low power factor. Simultaneously, governments are raising the bar for compliance with energy standards and reduction in carbon footprints. While growing demand is part of the problem, poor infrastructure equally contributes to electricity shortfalls that have hindered recovery in India's industrial sector and hurt its overall economic growth. Demand is far outpacing supply in meeting the rapidly growing electricity needs of the country. Electricity shortages have resulted in the loss of profits for many companies, loss in productivity as plants and businesses

have been forced to shut down for a few days a month or slow down manufacturing, and added operational costs as some businesses have been forced to pay for power backup units.

Energy management systems (EMSs), combined with the Internet Of Things (IoT), provide the ideal solution for these pressing challenges by supporting radical changes in the way energy consumption is monitored and managed. Efficient energy management is crucial today and the concept of a smart city is modeled on efficient management of energy.

Q Could you please tell me in brief how does an EMS system function and what are its basic components?

A The main components of Energy Management System are communication ready multi-parameter energy meters, PC, suitable interfaces and data cables (Twisted-pair, Ethernet, Fiber optic). RF modems can be used for wireless communication; GPRS system & DSL are used to collect data from remote locations. The panel, energy, and multifunction meters are used to measure and monitor the electrical parameters in order to detect electrical abnormalities and to identify opportunities for energy conservation through energy management system. ELNet is ElMeasure's Energy Management System (EMS), distributed as PC based and Web based data acquisition and monitoring software tool used to check the performance of electric utility grids to monitor and optimize the performance of the generation and/or transmission system. This system is used in any organization to achieve energy efficiency through well laid out procedures and methods and to ensure continual improvement, which will spread awareness of energy efficiency throughout an entire organization. The system will collect all electrical data like Voltage, Amps, Power factor, THD, Individual harmonics, peak demands from multifunction meters that enable necessary actions and correction at the right time. ELNet is a Client Server based EMS, the user can access the data online or offline and even generate the reports from any PC in Local Area Network. There are four different modules available in the system called as Configuration, Online, Datalog, and Reports.

Some of the Industries have their manufacturing locations in different parts of the world. Our Web-enabled software enables the Industry from different locations to simultaneously measure, monitor, and control. The web-enabled software also helps the consumer to utilize the expertise of the third party by looking at the report/ trends seen through the Internet.

ElMeasure offers to maintain the database with ElMeasure server and gives technical evaluation and remedy across the globe from our head office at Bangalore. We offer different media of communication to collect the data from any brand of meter and prepare a report to management in terms of efficiency, productivity, excess usage, breakdown warning etc.

Q What is multi-channel load management, and how do you do that?

A ElMeasure believes in innovation and the newest addition to our product range is the Multi-Channel Load Manager. The MCLM uses advanced engineering that is capable of monitoring and controlling current, voltage, power and energy for up to 15 different channels. The controlling function is done by the pluggable relay unit. This product is cost effective as it reduces 14 different meters required to perform the same task. MCLM can be used for diverse applications such as for billing and load pattern study in apartments / commercial complexes, Building Management System, Data Centers, remote reading and control using the ElNet software for data viewing, remote setup, and analysis. We have received very positive and encouraging response from our customers worldwide.

Multi Channel Load Manager...

Q What is demand controlling, how do you do that? What are its benefits?

A Demand control is a method of controlling the power consumption so as to not to overload the grid. Demand

is calculated in different ways, different parameters depend on the region/country.

Elmeasure demand controller helps the user to manage power optimally utilizing the feature of Time of Tariff for energy and demand thereby preventing paying of penalty for exceeding demand. The controller is precise, predictive and informative to get alarm and trip when the threshold limit is crossed.

Demand Controller...

Q What is Prepaid Metering Solution, and what are the benefits of it?

A Recovering electricity dues remain one of the major challenges in the power sector. Most distribution companies face serious problems in recovering electricity bills especially from government departments / apartment blocks / commercial complex etc.

ElMeasure's Prepaid Energy meter is a great product and we are seeing many of the Indian utilities encouraging switching from post-paid to pre-paid as it eliminates an entire layer of collections as all the energy is paid in advance of consumption.

We are making great strides with this product as we offer a wide variety of communication platforms with payment gateway where the recharge can be made from your Smartphone. The major benefits of our Prepaid Energy Meters are:

- Upfront payment for electricity and hence low overheads for service providers.
- Tamperproof construction
- The cost of manpower for billing / collection is substantially reduced.
- This avoids the hassles of human intervention as there is no need to enter the data into the meter. This makes the system more user-friendly.
- Displays balance energy in the meter, thus enabling the consumer to plan when to recharge.
- No billing disputes
- Allows consumer to budget electricity expenses
- Helps consumer to contribute towards energy conservation.
- Available in multiple wired and wireless communication options.

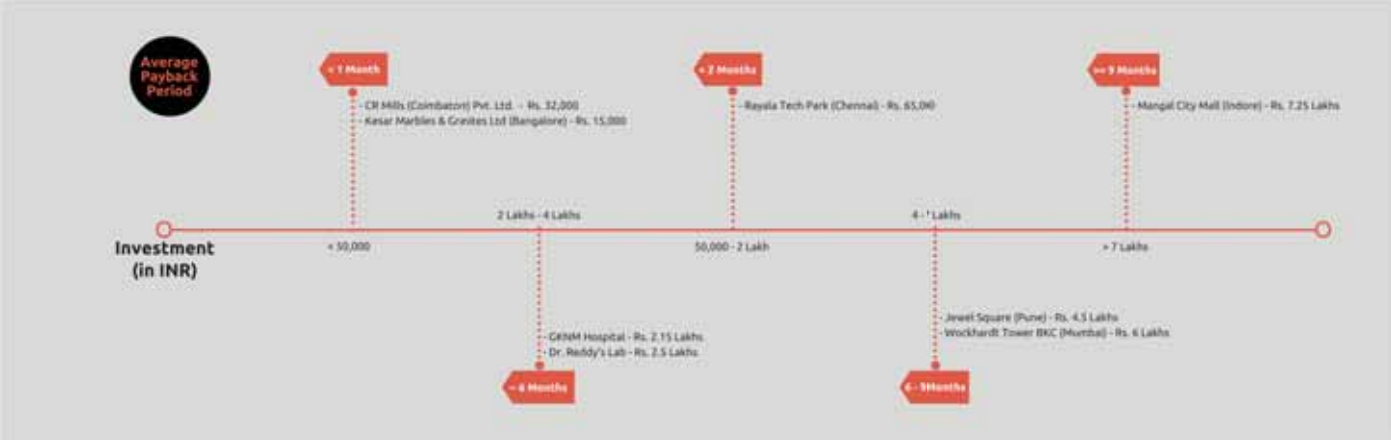
Prepaid Energy Meter...

Q Could you please cite a few (1 or 2 in brief) examples of cost saving through the deployment of EMS?

A We have several success stories from our customers who have used our products or 3rd party product using Elmeasure Energy Management System. Elmeasure EMS can support not only Elmeasure brand of products but also known brands in the market.

This makes Elmeasure EMS so unique that a customer need not run around to get support from multiple vendors.

Some of our well-known customers' pay back periods...



Most of the EMS users have recovered the investment within a short span of 6-9 months. Some of our well-known customers pay back periods are shown in the graph above.

Q What kind of post-sales support do you offer, and how do you manage that at all parts of this country?

A We have a presence across the nation. We have sales offices and dealer network spread across the country and we also cater to the Middle East region, the African continent, South East Asia market – and our major export is to Japan, which speaks volumes about the quality of our product.

Our Web-enabled software enables the industry from different locations to simultaneously measure, monitor and control. The web-enabled software also helps the consumer to utilize the expertise of the third party by looking at the report/ trends seen through the Internet...

ElMeasure believes in providing its customers with an effective after sales support even if you have a reliable product. Therefore, we have a full-fledged team to support our customers spread worldwide.

The support team is periodically trained to upgrade their skill and knowledge.

We have deployed Customer Support Engineers in key locations in India to provide prompt and effective support to our customers.

We are also equipped and offer online support even in the odd hours to beat the time zone barrier across the globe to ensure our customer's comfort and get the timely support.

Q What are your suggestions to the decision makers who are thinking of adopting EMSs at their activity centers?

A Energy efficiency is playing an increasingly important role in the industry. Rising energy prices, increasing pressure to improve profitability and the growing awareness for climate protection are important factors giving need to the introduction of an energy management system.

Energy Management is used to monitor and manage energy use by energy managers, facility managers, and energy consultants. Energy Management Software is designed and built on a simple premise; you can only start to save energy when you clearly see how you're using it. The EMS system seamlessly plugs into Excel. It turns detailed, raw energy-consumption data into useful charts and figures. You can use these charts and figures to visually identify: When and where you're wasting energy, how much energy is being wasted, progress made in reducing energy consumption etc.

Trying to save energy without seeing this information is a bit like trying to get somewhere in a strange city without any road signs or maps.

Visually analyzing your energy-consumption data helps you to figure out where to start your energy-saving efforts, where to go next, and how to monitor ongoing progress. It creates the core of all serious energy-saving efforts.