

GKNM Hospital Coimbatore, India

Success story on implementation of effective Energy Management measures and benefits achieved.

Introduction:

Established in 1952, hospital offers a wide range of world class healthcare services at affordable cost to the community. Started in 1952, this organization has grown into a large territory, super specialty 600 bedded hospital with staff strength of over 1300 which includes specialized Surgeons and Doctors. The hospital is spread in about 13 acres of land in Coimbatore city.

Power Utilisation:

Annual Energy consumption is 3,500,000 kWh that is drawn from State Electricity Board (SEB) supply. Captive power plant is utilised when SEB power is interrupted.

Solutions supplied by ElMeasure :

ElMeasure Energy Management System included 16 Nos. Multifunction Meters with ELNet 16 software with related accessories.

Benefits achieved

- The Maximum Demand could be continuously monitored accurately which helped to understand the load behavior and avoid penalty for exceeding Maximum Demand.
- The Power Factor could be maintained above SEB's prescribed level. The hospital could get incentive from SEB for maintaining healthy PF level.
- Performance of Diesel Generator (DG) could be continuously monitored. Performance of DG was determined after and before oil change.
- The important feeder energy cost could be worked out precisely.
- Daily, weekly and monthly energy reports were generated with ease, accurately and without doing any manual study.
- Balancing of actual energy consumption could be done with SEB meter and energy bill thus substantially reducing the energy loss.
- The fund planning for SEB energy bill was possible in advance.
- The critical electrical parameters such as Maximum Demand, Power Factor, Voltage & Current could be monitored continuously and accurately.
- Some of the expensive voltage sensitive bio medical equipment could be protected against grid voltage fluctuation.
- Non critical loads could be relocated and timing of operation of such loads could be planned which directly benefited in avoiding exceeding Maximum Demand.

Investment – INR 0.215 Million

Payback period – <9 months

