

PowerAMR Solutions Powering Profit



- Energy is a driving force for development. Energy Management is not by chance, it is a Mission with a Target. Just like every rupee is accounted, audited and analyzed in depth, it is equally important that very unit of energy spent is accounted and analyzed to ascertain its efficient use.
- In today's competitive world, productivity and profitability of organizations, industries and utilities are inextricably linked to energy management.
- Energy Management System is a comprehensive solution for energy information acquisition monitoring, analysis and reporting that enhances the experience of energy management.

Key features of Energy Management System

- **Integration** with the existing system
- **Freedom** to network hundreds of meters
- **Flexibility** to share data across enterprise
- **Accessibility** on Internet
- **Empowers** to control energy costs through its 360 degree reporting and intelligent analysis modules.
- **Watchdog** for proper maintenance of machineries
- **Plug & Play** System

EMS supports various Business Solutions

- Energy Audit
- Online Alarms
- Demand Management
- System Health
- Bill Verification
- Production Cost Calculation
- Improved accountability
- Exception Reporting

Tools for EMS

- **Power Monitoring:** Every 5 second update of all electrical parameters for all feeders, incomers, DG set
 - **System Health:** Overload, Underload, Phase unbalance, Harmonics, Low PF, On hours, Interruptions
 - **Configurable Alarms:** Online and MIS based Exceptional reporting and alarms
 - **Energy Audit:** Department, Group, incomer, feeder wise energy, Loss circuits, Bill Verification
 - **Production Cost Analysis:** Production in Rupees per unit of energy consumed, DG efficiency
- * All reports available Feeder, department wise and are time based, shift wise and for selectable period*

Benefits

- ✓ Manual intervention minimized
- ✓ Improved fault Redressal
- ✓ Reduced Outage Time
- ✓ Lesser Equipment Problem
- ✓ Improved Maintenance efficiency
- ✓ Efficient Energy Optimization
- ✓ Improved Productivity
- ✓ Daily Logs

Other Features

- Accurate & Consistent Online Information
- Data Historian for quality analysis
- Central database System
- Online Energy flow
- Configurable Alarm
- Trends through Bar graphs, pie charts, line trends

Parameters Monitored:

Phase Wise Instantaneous Voltage, Current, KW, KVA, KVAR

Cumulative KWH, KVAh, KVARh lag, KVARh lead KW, KVA, KVAR PF

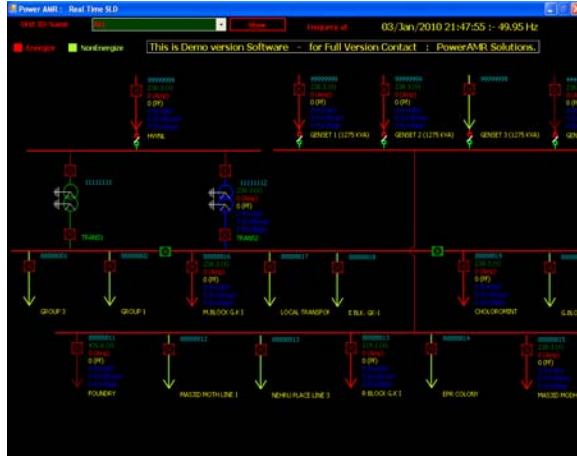
Total Harmonic Distortion Current Voltage

Frequency

Time Based Graphs, MIS

Single Line Diagram

All electrical parameters of incomer/ feeder/ genset available on SLD on real time basis



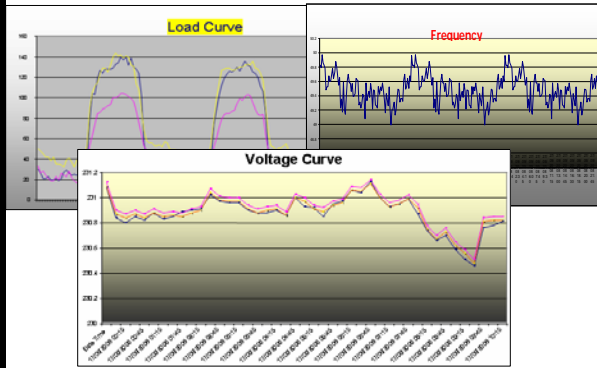
Online Power Monitor

Real Time Monitor of Phase wise Voltage, Current, Frequency, KW, KVA, KVAR, PF



Online Data Availability

Voltage, Current, frequency, PF curves



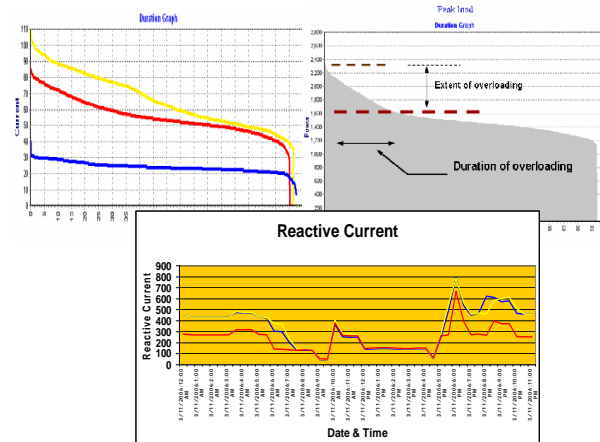
Energy Audit

Feeder, Department Energy, Loss Circuits, Production Cost Analysis, Per unit Production



System Health

Overload, Relative Phase Unbalance, Harmonics, System Peak, Avg PF, Power Interruptions



Online and Historical Alarms

Harmonics, Potential Failure, Low voltage, Low PF, CT out

