Case Study for a Major Steel Manufacturer

Situation

- 300000 Sqft. Area in 13 buildings spread across 1.75 sq km
- 1.25 million units electricity consumption per month only in Admin and Ancillary buildings
- Unstructured facility expansion during the last 6 years
- Excessive off-peak energy usages and unmanaged blind spots
- Unknown power factor, harmonics and power quality and energy disaggregation
- Unknown supply and load disturbances
- Inability to quantify and isolate electrical problems

Task

- Mandate to reduce energy and maintenance cost
- Identify distribution imbalance in the targeted buildings
- Measure various electrical parameters of critical and representative equipment
- Improve maintainability
- To measure and alert users about any threshold breaches happening in the electrical parameters
- To quantify usage and wastage

Result

- Identified load imbalances. Helped to enhance equipment safety by providing real time alerts on threshold breaches of electrical parameters
- Improved visibility and highlighted the pre-existing maintenance blind-spots through workshops and training
- Curbed unnecessary usage and enforced overdue spare replacements
- Ensured better SLA adherence
- Engaged continuously for cost cutting in AMC, Energy and Manpower
- Quantified specific energy for each ancillary
- Helped to save energy close to 5% per year.

Action

- Site survey done to identify the energy guzzlers
- Installed smart energy meters and monitoring hardware and networked to SEnergy cloud.
- Provided energy metrics of individual buildings
- Configured virtual meter to show the total energy metrics in the facility
- Defined and quantified efficiency and conservation metrics
- Analysed the complete power quality with time stamps
- Provided visual analytics and reports
- Isolated and alerted O&M on wastage and loading pattern
- Configured alerting system to intimate the O&M team ensuring them to take action without time delay
- SEnergy Operating Centre created , configured and trained the O&M team.

Powered by SENERGY IOT