



SEnergy Application for Process Monitoring - Case Study for Monitoring & Controlling the Process of Oxygen Generation executed thru SEnergy

Location - A Multispeciality Hospital in India

- Cost of energy spent for per unit measure of oxygen generated was unknown
- Steep increase in overall energy usage
- Unable to quantify the Oxygen Generator's energy consumption
- Root cause of supply disturbance unidentified
- Consumption of Oxygen unknown
- Oxygen pressure and its leakages remain as blind spots

Situation



- Measure various electrical parameters of the equipment
- Identify distribution imbalances, Consumption and leakages
- Measure & alert users about threshold breaches in real time
- Improve maintainability
- Get into the process and identify blind spots
- Monitor and Control quantity and pressure of the oxygen supplied
- Mandate to Reduce Energy Consumption

Task



- Cost of Oxygen Generated has been quantified
- Customer able to manage the power demand vs load properly
- Timely cutoff of the equipment eliminating the energy wastage due to continuous run
- Ensured efficient operation of oxygen generator, by eliminating wastage of oxygen generated
- Identified and corrected load imbalances and blind spots
- Curbed Unnecessary Usage
- Overall Target bill reduced by 30%
- Obviated need for frequent and expensive energy audits

Result



- Supplied and Installed
 - Smart Oxygen Flow meter and networked with SEnergy Cloud
 - Smart Multi function electrical meters on feeding DB of the oxygen generator and networked with SEnergy Cloud
- Analyzed Consumption, usage and wastage pattern and Provided periodical visual analytics and reports
- Quantified Peak and Off-Peak consumption
- Provided real time alerts of energy and power quality metrics
- Isolated and alerted on abnormalities
- Suggestions Made to enhance the performance and efficiency
 - Arrest the leakage in the delivery pipelines and valves
 - Redesign / retune the generator such that equipment cuts off,
 - there is no consumption
 - desired quantity of oxygen at required pressure is stored in the tank

Action

