

Utility Monitoring System (UMS)

Overview

At a time when the manufacturing facilities are facing great challenges maintaining profitability, a focus on reducing costs demonstrates one of the best ways to improve the bottom line. The demand on plant operators to improve operating margins, together with global pressures for environmental regulation, creates the need for innovative thinking and outside ideas to optimize energy utilization.

IES Group has been bringing cost effective and innovative metric analysis techniques and web-based Business Process Improvement solutions to North America since 1997. We takes a comprehensive look at optimizing all aspects of energy efficiency, energy management, implementation and sustaining the benefits. Our energy specialists use a variety special analytical techniques to evaluate ideas and develop energy improvement solutions that increase plant profitability.

Analyzing Gaps

Daily energy consumption is calculated for process units. These calculations are used to generate energy performance trends that help identify both systematic and transient energy efficiency gaps. The monetary cost of the transient energy efficiency gaps is also trended. This allows the operators, engineers and managers to see the amount of money lost when the gaps arise.

In addition KEI are calculated for each unit. The KEIs become targets that are realistic energy consumption rates based on best possible energy performance for each particular unit. The target KEIs are compared to the actual rates to help locates of transient energy loss. The KEIs provide information to the plant operators, who are in best position to make the necessary operational changes to minimize energy losses.



Key Facts

- *Electricity prices have increased 30% since 2003*
- *The D.O.E. predicts energy costs will continue to rise another 57% by 2020*
- *Energy is the leading contributor to Green House Gas emissions*
- *5% - 80% Energy loss is due to operational inefficiencies in a wide range of equipment used for facility operations and manufacturing processes*
- *More than 50% of electricity consumption is by threephase motors. The D.O.E. estimates that motors lose over*
- *12% of their Energy due to phase imbalance*
- *Operator Performance vs. TAKT, TOP 10 Issues Pareto, & 1st Time Quality*

Why IES Group?

With a decade of experience and many credible customers across North America, IES is uniquely positioned to help manufacturing companies achieve excellence in energy management. Our experience has given us significant expertise in energy optimization, management and consulting.

IES GROUP



At a Glance

- *Calculation and monitoring key energy indicators (KEI) with target ranges for operators*
- *Identification of lost operational opportunities resulting from plant disruptions*

