# POWER QUALITY AND ENERGY MANAGEMENT

Empowering people. Exceptional services. Delivering on promises.

SOLUTIONS





# Why Invest in Power Quality and Energy Management?

Keeping your plant on a consistent and dependable production schedule is key to keeping your costs down and your profits up. By taking steps to improve the quality of your power and manage your energy usage, you can avoid expenses that affect your company's bottom line. By investing in power quality and energy management ("PQ&EM"), you are taking steps to reduce operating costs and minimizing environmental impact while avoiding situations such as voltage sags that can cause unexpected shut-downs.

Invest to save! ESCO can help you!

# Partner with ESCO

When you work with ESCO, you are working with a company that forms strong relationships with our clients which gives us in-depth knowledge of your plant, what its needs are, and how it runs. It's a partnership approach, meaning we partner with our clients in business and become an integral part of your team.

ESCO has been in business for over 50 years, and has specialized in plant automation and electrical engineering for over 27 years. We empower our people with tools and resources to ensure their success so they can deliver exceptional services. ESCO employs the industry's experts, and through our experience we deliver on our promises with solutions that add value.



Rockwell Automation

Recognized System Integrator

Control • Process • Power

# Take Advantage

- Avoid voltage sags and keep production lines on schedule
- Correct energy problems that could shorten the lifespan of your equipment
- Improve your power quality and keep equipment working efficiently and accurately
- Avoid peak utility charges with an energy management plan
- Save energy by minimizing excess usage
- Lower overhead costs through energy conservation

## - SOLUTIONS

#### Measurement & Verification

Reduce your overall energy costs through monitoring and managing your usage. To help you understand your usage and verify your utility bills, we can transform the data from your plant into information that can be utilized to analyze your energy costs.

#### Load Profiling

Load profiling analyzes energy usage and demand and stores the information in a database that can be used to track consumption patterns. Tracking your energy consumption can be used in working with the utility companies regarding rates.

#### Cost Allocation

Cost Allocation allows you to allocate costs to a specific department or facility. The reports generated will assist you in analyzing bills for all utilities, including water, air, gas, electric, and steam.

#### Energy Dashboards

Energy dashboards allow you to monitor energy usage throughout your production system.

#### **Energy Utilization**

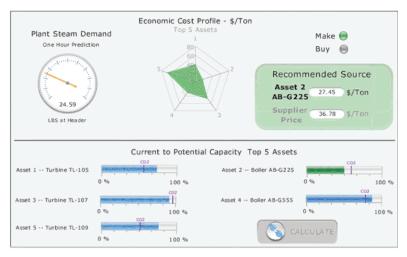
Your facility's energy utilization will be consistent and efficient, allowing for lower overhead costs.

# Electrical Load Management

With our solutions in electrical load management, you can reduce peak demand and eliminate excess charges. You can also lessen the impact a power outage will have on your facility. Reduce the effects of low quality power and high harmonic content, while automatically controlling onsite generation and secondary systems.

#### We offer:

- Power Quality Monitoring
- Electrical Distribution System Monitoring
- Demand Management Systems
- Load Curtailment and Shedding Systems
- Power Factor Control
- Generator Control System



### **Electrical Engineering**

Energy is one of the most important assets to an industrial facility. After ESCO determines the power quality impacts to your plant, our electrical engineers can design electrical systems that deliver high reliability impacts which reduce downtime, as well as, increase energy savings. Our electrical engineers have the capabilities to design from incoming plant power down to control panels, providing high quality design packages and installation services. Manufacturing plants are becoming high tech facilities and the importance of high quality power is essential to mitigate losses incurred due to power quality.

#### Central Utilities Plant Control Solutions

Optimize your energy systems for a variety of utility equipment with central utilities plant control solutions. Air compressors, chillers, cooling towers, generators, heat recovery and pumping systems are all included.

- Reduce costs related to refrigeration, compressed air, steam, and hot/cold water
- Improve automatic and manual controls
- Improve consistency of utilities delivered throughout your facility
- Track performance of central plant equipment for predictive maintenance
- Determine optimal usage of cogeneration steam

#### Contact Our Team Leaders

You are encouraged to contact our team leaders to learn more about what we offer in PQ&EM. We are eager to learn about you and your facility so we can help you SAVE.

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