

Rockwell Software Industry Solution

Utilities & Energy Optimization

Optimize utilities and energy supply to minimize variability and provide reliable supply at the lowest cost and within environmental limits

Benefits:

- Minimize energy cost per unit of product produced
- Accommodate production variability with an efficient supply of utilities and energy
- Optimize generation at the lowest cost of supply

Rockwell Software Solutions

Our solutions leverage Rockwell Automation's 100+ years of innovation, experience and global support. Industry best practices are incorporated into every application, which is built upon a composite application framework that leverages a Service Oriented Architecture (SOA). This scalable solution, when combined with library-based content, offers personalization options that promote faster user adoption and time-to-value.



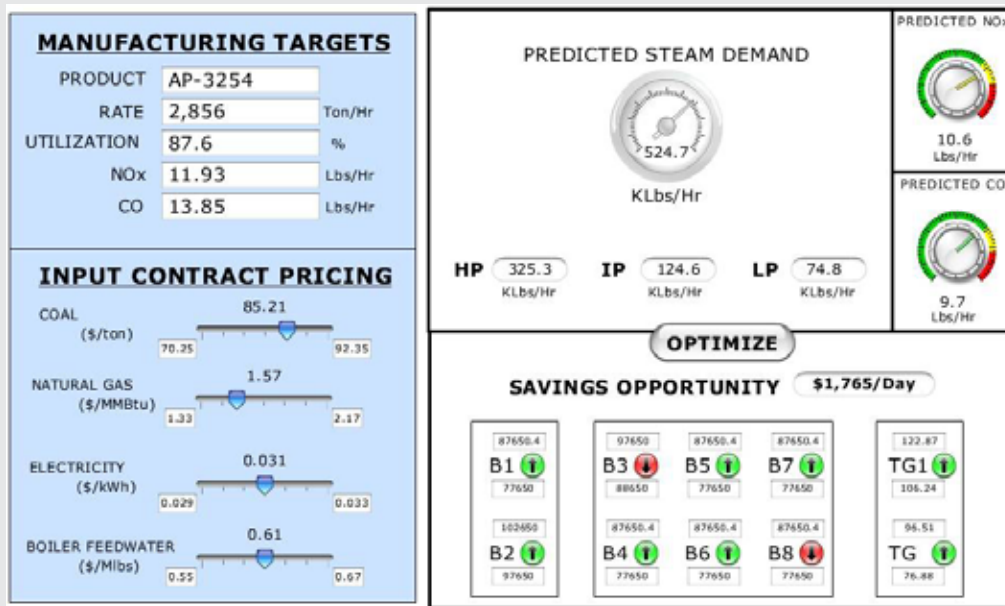
The Challenges

Manufacturers are continually challenged to maximize production efficiencies, reduce operating costs and manage environmental impact while meeting or exceeding product quality specifications. With the rise in fuel prices, energy costs in utility generation plants make up a significant portion of manufacturers' operating budgets. In addition, volatility in market demand translates into operating variability at the utility plant, thereby compounding the challenge of maintaining a reliable and cost-effective supply of utilities. To remain competitive, producers must find innovative ways to reduce these energy costs, while sustaining an adequate generation of steam, chilled water and compressed air. This keeps processes operating efficiently with varying products and production rates.

Rockwell Software recognizes these various challenges and offers an application focused on delivering valuable information to aid in reducing production variability and costs and optimizing utility and energy supplies.



LISTEN.
THINK.
SOLVE.



Provide a reliable supply of utilities and energy to meet demands

Utilities & Energy Optimization

The Utilities & Energy Optimization Application from Rockwell Software provides coordination and optimization of units in the utility plant.

Advanced Modeling and Control

Leveraging the use of advanced modeling and control technologies, the application minimizes variability of all critical units within the utility plant or powerhouse, including boilers, chillers, compressors, condensers and turbines, by anticipating changes in demand and actively controlling equipment within limits. This promotes a reliable supply of utilities and energy at desired operating loads.

Minimize Variability and Optimize Supply

Once variability on individual units is reduced, the application aids the utility plant in performing at its optimum, by generating load targets while minimizing overall fuel consumption and costs. Using a mixed-integer solver, the application detects the availability and potential of each asset and determines the optimum load across the entire generating fleet. This provides an

efficient supply of energy and utilities within reliability and environmental constraints.

The utility plant can adapt to changes in production demand through the use of proven predictive technologies from Rockwell Software. By adjusting process parameters, including dispatch and load optimization, production requirements can be met at the lowest possible cost.

Reduce Energy Costs

By optimizing the entire utility plant through a global optimizer, producers can minimize the energy cost per unit of product. This is accomplished by reducing fuel consumption and steam pressure excursions, as well as by accommodating changes in demand and reducing environmental impact. In addition, units that significantly under perform can be alarmed.

www.rockwellautomation.com

Power, Control and Information Solutions Headquarters

Americas: Rockwell Automation, 1201 South Second Street, Milwaukee, WI 53204 USA, Tel: (1) 414.382.2000, Fax: (1) 414.382.4444

Europe/Middle East/Africa: Rockwell Automation, Vorstlaan/Boulevard du Souverain 36, 1170 Brussels, Belgium, Tel: (32) 2 663 0600, Fax: (32) 2 663 0640

Asia Pacific: Rockwell Automation, Level 14, Core F, Cyberport 3, 100 Cyberport Road, Hong Kong, Tel: (852) 2887 4788, Fax: (852) 2508 1846