

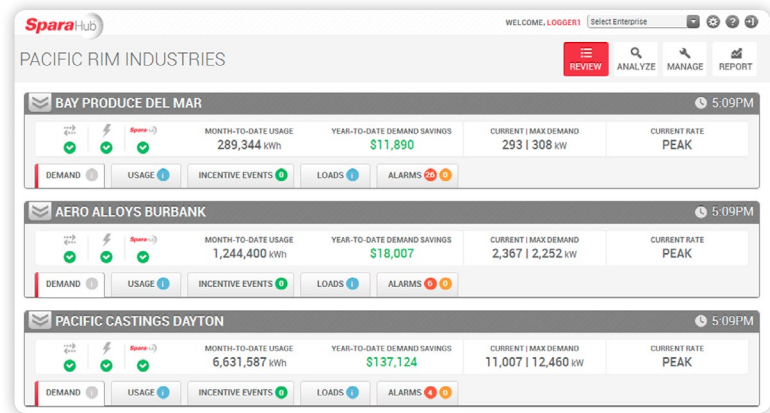
Spara Hub® and Spara DM® (Demand Manager)

Powerit Solutions sets the demand management standard. Our Spara Hub® and Spara Demand Manager technology link industrial facilities with the smart grid so customers can effortlessly control energy use for savings and sustainability.

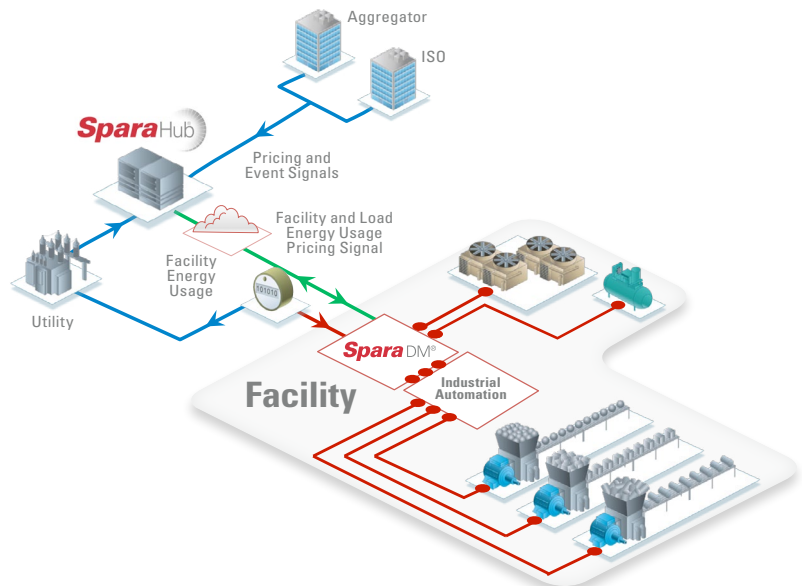


Key Features

- ➔ **Intelligent Demand Management**
Reduce electrical energy costs without compromising production, quality, or safety. Use customer defined rules to prioritize loads to protect equipment, process, and product.
- ➔ **Smart Grid Connected**
Utilize real-time energy pricing, and integrate with the latest ISO, utility, or aggregator programs.
- ➔ **Advanced Demand Control and Analytics**
Focus on the processes and loads contributing to peak demand charges.
- ➔ **Enterprise Energy View**
Reduce, consolidate, and compare energy usage from multiple sites.
- ➔ **User-Friendly Tool**
Simplify demand management through a clear interface to set demand limit and load constraints, view demand control actions and savings, and manage Demand Response participation.
- ➔ **Hosted Energy Data**
Easily access data from any internet device without maintaining a VPN.
- ➔ **Robust Data Storage**
Protect energy data from local intranet issues, equipment failure.



➔ Enterprise level overview of all facilities, providing a snapshot of energy usage, demand management savings, current demand, time of use period, and local time.



➔ The cloud-based Spara Hub® gives Spara DM® users and Powerit partners a user-friendly demand management tool that enhances their ability to optimize energy use for savings and sustainability. As illustrated above, the Spara technology platform provides a true last mile connection to the smart grid.

continued >

Demand Management

Spara DM[®] uses sophisticated load prediction and control algorithms, built-in load-shedding intelligence, and data drawn from industrial equipment, electricity meters, and utility transmissions to optimize facility energy use. Customers define rules for controlling energy loads, then use the system to manage energy use for cost savings, efficiency, and maximum feasible participation in demand response and other smart grid programs. The system's web-based interface allows ongoing monitoring and reporting to track usage against goals and it works without compromising production.

Offering a suite of demand management solutions, Spara DM brings real-time utility pricing information to energy use decisions and automates a facility's response to grid status. The foundations for the solution are a robust utility meter interface, utility rate structure calculations, peak power prediction, and load curtailment scheduling. Spara DM is designed to interface with existing automation equipment and a broad range of industrial loads.

Demand Control

Demand Control predicts when spikes in energy use are about to occur and takes automatic action to reduce consumption while maintaining strict control over operations – reducing utility peak demand charges.

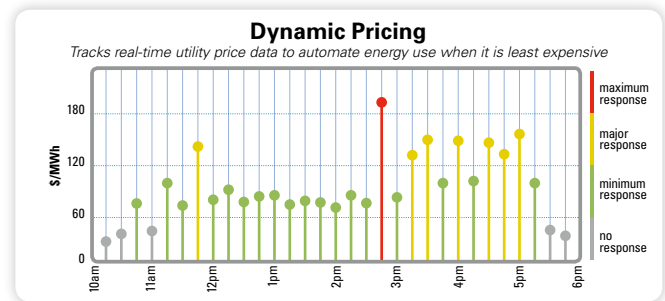
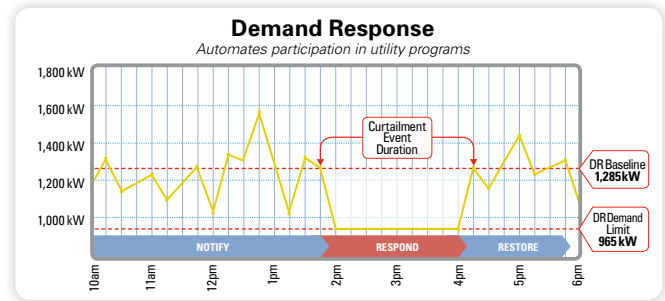
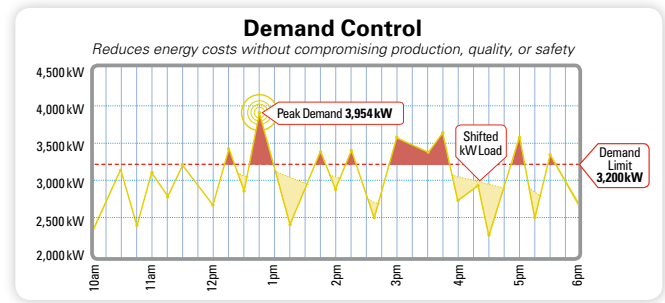
Demand Response

Demand Response (DR) automates the facility's response to a utility or aggregator signal to reduce load when the grid is under stress, ensuring consistent participation in DR events, and enabling new revenue streams through participation in short response time DR programs.

Dynamic Pricing

Dynamic Pricing automatically adjusts power usage based on real-time and day-ahead pricing rates.

Optimizing Energy Use



Key Features

- ➔ **Peak Power Prediction**
This tunable, non-linear algorithm predicts demand peaks enabling fine-tuned control.
- ➔ **Embedded Operator Intelligence**
Production requirements and equipment constraints dictate load curtailment controls.
- ➔ **Load Curtailment Scheduling**
Uses configured constraints to shed just the loads needed to avoid setting a new demand peak
- ➔ **Adaptive Demand Limit**
The adaptive demand limit ensures that the facility is running at the lowest peak demand within the defined operational constraints.
- ➔ **Utility Interval Management**
Automatically manage energy use based on the utility rate schedule and peak calculation.
- ➔ **Web-based Interface**
Spara software has an easy-to-use web-based graphical interface.
- ➔ **Customized Alarms**
The alarm utility notifies users of events that require attention, such as demand exceeding the savings setpoint, loss of a utility pulse, or a customized event related to a data point such as temperature.
- ➔ **Real-time and Archived Reporting**
Spara DM generates graphical reports on energy usage, cost savings, and more.