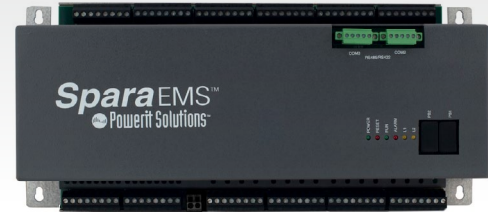




## Spara-Powered Energy Management

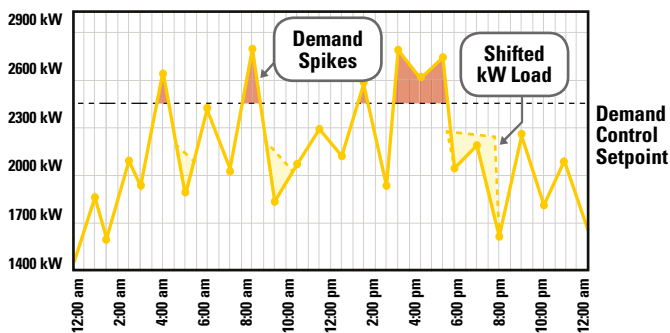
With Powerit Solutions' advanced Spara energy management system (EMS), you can automate control of energy use so that your facility runs at optimal efficiency, you pay the lowest possible rates, and you can participate in incentive programs that pay you for unused kilowatts.



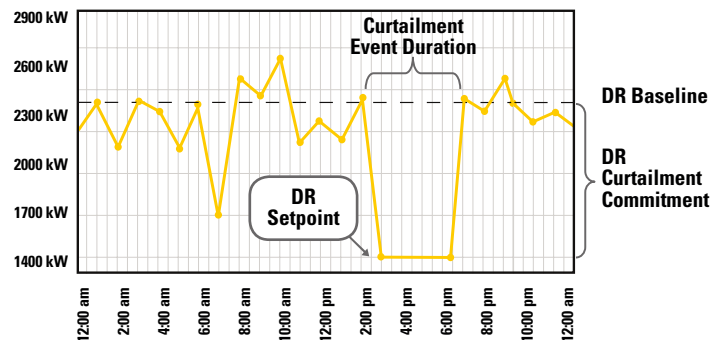
**Spara supports four primary load-shedding strategies: demand control, demand response, dynamic pricing optimization, and energy efficiency.**

### ➔ Demand Control

Demand control involves figuring out how and where costly energy spikes occur, then making precisely timed load reductions to avoid those spikes and thereby reduce peak demand charges. Spara's rule-based demand control structure lets you adjust strategies according to how aggressively you want to curtail loads, and it ensures that you won't disrupt production—it will never break the rules to save power. With Spara, companies can often shave 10 to 30 percent off their monthly demand charges.



### ➔ Demand Response



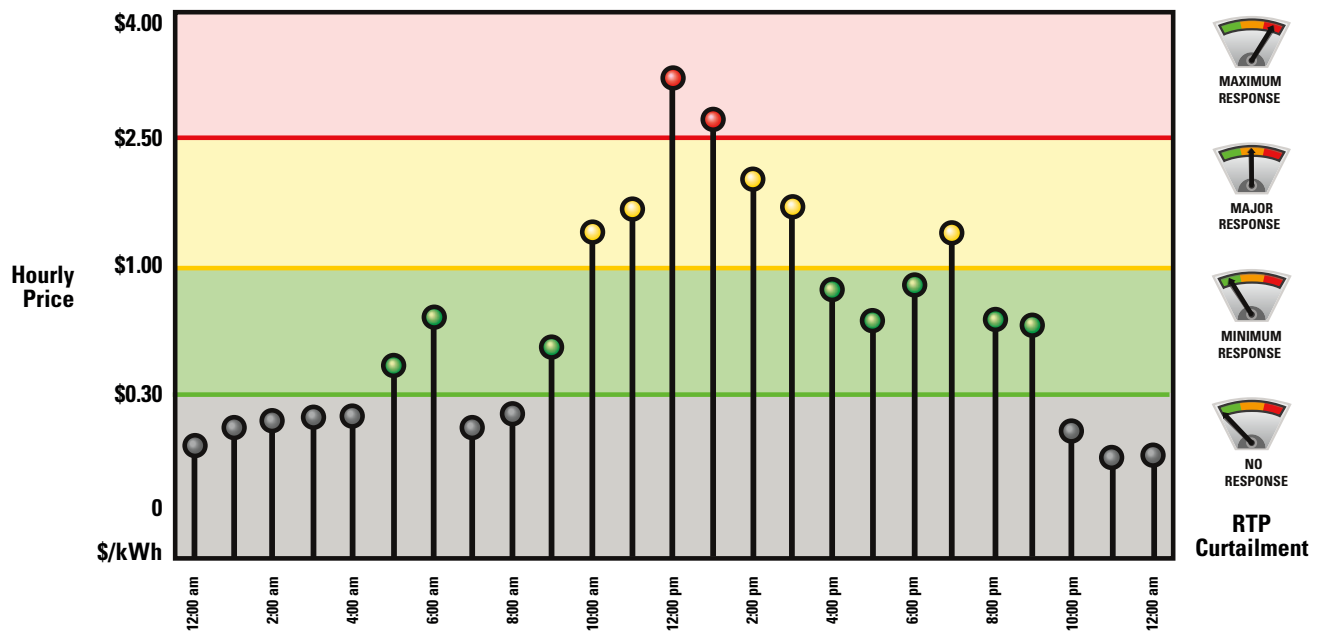
Demand response (DR) programs offered by utilities or power system operators let you earn money by curtailing your electricity use on demand. There are two types of DR programs:

- **Standby/reliability.** You commit to specific load reductions when the grid is under stress. These infrequent events often last 2 to 4 hours.
- **Reserves/market-based.** You agree to cut usage based on a set price. You can decide daily or on shorter notice whether you want to participate. Events are more frequent and usually last 1 hour or less.

An advanced EMS is essential to getting full value from DR programs. Manually manipulating complex processes to achieve energy savings is difficult to impossible for most companies. It can also introduce human error and potentially compromise production. In addition, some of the more lucrative DR programs require automated communication between the energy users' and supplier's DR systems via the Internet.

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## ➔ Dynamic Pricing Optimization



Many utilities employ dynamic pricing strategies, such as real-time pricing, that involve rate changes based on the market price of electricity, weather events, or other conditions. These changes can happen with anywhere from just minutes' to 24 hours' notice. Spara lets you respond automatically to ongoing price fluctuations by shifting consumption to lower rate periods or reducing consumption during costly super-peak times.

## ➔ Energy Efficiency

Energy efficiency—not only using less energy, but also using energy at the least costly times—is often a byproduct of implementing demand control, demand response, and dynamic pricing programs. These initiatives typically reveal best-practice opportunities for eliminating waste and optimizing use. For example, working with equipment operations to get the greatest combined benefit from curtailments for demand control or DR can uncover scheduling or variable control strategies that can permanently remove excess kWh consumption.

## ➔ Your Optimal Strategy

Spara gives you the ability to precisely control equipment in different ways according to the optimal strategy for your facility. For example, in a demand control strategy you could reduce power incrementally to a piece of equipment, or process — based on factors such as the process stage or material — knowing the actions prescribed will not affect your productivity. In a DR strategy, you might shut down a piece of equipment entirely for a period of time to earn incentive payments for that event, knowing the shutdown is tightly controlled to ensure that your benefit criteria are met. With each strategy, your rules will be followed to preserve an acceptable balance between energy savings and production requirements.

The optimal strategy for your facility might include a combination of two or more strategies—but only if you can make the finely tuned adjustments needed to get the most from each strategy and ensure that they don't work against each other. Doing this manually is next to impossible; Spara does it for you.

