How Can Electrical Load Shedding Benefit You?

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Energy costs are a major operational expense for most food manufacturers — but you're not at the mercy of your utility bills. With an advanced energy management system, you can control your 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.

Electrical load shedding is a smart move for food manufacturers — who wouldn't want to cut a major operational cost without adversely affecting production? But achieving significant savings requires a strategic approach. There are several ways to shed loads; understanding the benefits and challenges of each will help you make the right choices for your facility.

Demand control: Demand control involves making precisely timed load reductions to prevent energy spikes. Savings come from lower peak demand charges. We've found that with Powerit Solutions' Spara energy management system (EMS), food manufacturers usually shave 10 to 30 percent off their monthly demand charges and achieve ROI in 18 to 20 months.

Time-of-use management: With this approach, often called "load shifting," savings come from managing operations to shift power use to nonpeak times.

Real-time pricing (RTP) optimization: Utilities that use this pricing method change their rates frequently based on the market price of electricity. Rates can change with anywhere from 10 minutes' to 24 hours' notice. Participating in an RTP program means that much of the time rates are 20 to 40 percent lower, but peak rates can be astronomical — even as high as 100 times the usual rate for short periods. Saving money involves shifting your facility's energy use as much as possible to lower-priced periods and away from super-peak periods.

Demand response: Demand response programs, which let you earn money for reducing electricity use on demand, come in two main flavors: standby/reliability and reserves/market-based. With standby/reliability programs, you commit to specific load reductions when the grid is under stress. These events are infrequent and typically last two to four hours. Prices are usually $30,000 to $60,000 per MW.

With reserves/market-based programs, participation is usually voluntary. Instead of committing in advance to cutting a certain number of kilowatts, you agree to cut usage for a quoted price. Participants can decide on a daily basis or with even shorter notice whether they want to participate and for what amount. Events are more frequent and typically shorter (one hour or less). Prices are typically about $40,000 per MW.

Your utility may offer one or both types of demand response programs — or neither.

For more information, please visit www.poweritsolutions.com [1].

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