

# Reducing Utility Costs

## Part 1: Utility Relationships



Electricity is one of the largest financial burdens faced by plant managers. A number of options are available to minimize these costs.

Even though your utility claims your rate structure is "set in stone," be innovative and investigate ways to reduce costs within your rate structure; work with your utility to understand how you can more readily serve them.

One approach could involve building your own sub-station and purchasing electricity at a higher voltage. This often results in a simple payback of three to four years.

Many facility managers work within their rate structure to minimize their demand charge. Your rate's demand charge compensates the utility for maintaining enough infrastructure to service your peak load. It is a monthly fee based on each month's 15-minute or 30-minute peak load.

Steady electrical demand makes you a cost-effective client. You may be able to level off your peak demand by monitoring your power usage and shutting down non-essential loads as demand rises. Payback on simple monitoring systems is often less than six months.

Utilities maintain load profiles within certain upper and lower limits to ensure the stability of their system. If you are willing to risk a complete disconnect from the utility with a negotiated warning period, you may be able to reduce your electrical rate. The adjusted rates may be less than 1/10 of your current cost, and the option to disconnect is rarely utilized by the utility.

You can also help your utility maintain its load profile by consuming most of your electrical energy during off-peak hours at a reduced rate. For example, if your facility works a single shift, consider scheduling this shift during the time of day that other electrical consumers are not demanding electrical power.

Consider installing capacitors if your utility has a power-factor penalty clause in their rate structure or if you are billed based on KVA, rather than kW. Installing the equipment necessary to meet your utility's power factor minimums usually has a payback of two years or less.

Work closely with your utility to discover whether they have energy retrofit subsidy plans that help pay the capital costs of new energy efficient equipment, such as lighting, variable speed drives, and motors.

Finally, perform a tax-site survey to determine your facility's energy tax exemption level. Depending on the state, this exemption allows processing plants to forego taxes on up to 100 percent of their energy costs.

### For more information...

about reducing your electrical bill, call Doug Post at (800) 827-1662, ext. 159 or e-mail him at [doug.post@interstates.com](mailto:doug.post@interstates.com).

*This article was featured in the March 6, 2006 issue of Feedstuffs magazine. For the full article, read "Lower Electrical Costs Possible."*