

Make it Electric



Energy information to help you manage your operation

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It's easy to upgrade with EZ-Lights

Program delivers long-term energy savings to businesses and ag operations

Del Jose, president of Fergus Falls, Minnesota-based Skyvision, Inc., goes to work every day thinking about the profit puzzle. It's an ongoing conundrum, with sales on one side of the ledger and costs on the other. To boost profits, one must think strategically about increasing sales or cutting costs.

With a new program called EZ-Lights from Otter Tail Power Company, the light is going on for Jose and other business owners and agricultural operators in the Fergus Falls area.

As with many companies, one of Skyvision's major operating expenses is energy. When Skyvision became the first recipient of the EZ-Lights program, Jose was able to invest in more energy-efficient lighting systems, cut the time it will take to recover the investment, and gain long-term energy savings.

Skyvision, a one-stop shop for anything satellite related

Skyvision's primary business is selling components and parts for large satellite dishes and other satellite equipment throughout the United States and 200 countries around the world. The company also manufactures the Ice Zapper, a heater for satellite dishes that keeps them free of snow or ice

that could cause signal loss. It holds exclusive rights, through the National Hockey League and National Football League, for Dish Skins, dish covers that feature professional team logos and allow consumers to individualize their dishes. Finally, the company provides technical telephone support for a handful of satellite providers.

"What makes us unique, and what gives us the ability to sell around the world, is that we are a one-stop shop for anything related to satellite services," said Jose. "Very few companies provide large satellites or parts for them anymore, but we sell everything right here."

Easy does it

EZ-Lights helps small- to mid-size businesses and agricultural operators overcome obstacles to making their lighting systems more energy efficient. Barriers often include limited capital, the need for fast payback, and a general lack of time and expertise to initiate the process.

The new program provides customers a one-stop service that includes a free lighting audit, objective recommendations, minimal time commitment,

processing of all paperwork, and installation of high-quality energy-efficient lighting systems. In addition, program participants receive rebates of \$425 per kilowatt saved annually as a result of the lighting retrofit with a maximum of 60 percent of the installation cost.

EZ-Lights is part of Otter Tail Power Company's Conservation Improvement Program (CIP). Under Minnesota law, energy utilities are required to dedicate a portion of revenues for projects and programs that reduce electricity and natural gas consumption. Utilities collect funds through adjustments or surcharges and use them to provide rebates and other financial incentives to customers who purchase energy-efficient products. They also can use CIP funds for energy audits, consumer education, and research and development. Each year Otter Tail Power Company dedicates 1.5 percent of its gross revenues to more than 20 CIP programs that benefit energy consumers.

A look inside:

Energy savings with EZ-Lights
Summer cycling

EZ-Lights

before & after



Otter Tail Power Company's partner in administering the EZ-Lights program is the Center for Energy and the Environment (CEE), a Minnesota nonprofit that promotes responsible and efficient use of natural and economic resources.

Using a comprehensive database from Otter Tail Power Company, CEE takes the program directly to potential participants by contacting businesses and agricultural producers about the program's availability. To qualify, a business must have an average monthly peak demand of 75 kw or less. All ag operations qualify regardless of their usage.

A CEE energy auditor then visits the site and conducts a thorough fixture-by-fixture and light-by-light audit of performance and electricity usage. The auditor presents retrofit recommendations and specifications, calculates potential rebates and savings, and provides the business owner with a list of preselected contractors to do the job. If the business owner decides to proceed, the auditor also completes Otter Tail Power Company's rebate application forms.

Better vision for Skyvision

"What impressed me was the detail that went into determining the usage," said Jose. "By taking each fixture, the audit gave me the opportunity to look at potential savings and recovery time for different parts of our operation rather than the whole. That gave me the flexibility to pick and choose if I couldn't afford to do everything at once."

Skyvision wasn't exactly in the dark before the EZ-Lights program came along. Jose has been considering a lighting upgrade for some time, not only to help his 24 employees see more clearly in the main building and three warehouses, but also to cut the costs associated with outdated lighting fixtures and systems. Even the newer fixtures were at least 15 years old and were not giving the light they once did. But the question was how to make it work with Skyvision's bottom line.

"Cost is always an issue," Jose said. "We initially figured a five-year payback on an upgrade but, with the increased rebates from Otter Tail Power Company, that's been cut to just a little over four years. From that point on, the savings will go directly back into our business."

Other benefits include additional light and more uniform light. Also, the new lights generate less heat than the old metal halides so it will be easier and less costly to regulate temperatures.

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Vinco, the contractor on the job, retrofitted old linear fluorescent tubes with a new generation of energy-efficient fluorescents throughout the four buildings. In the warehouses the contractor changed high-intensity discharge metal halide fixtures to fluorescent lights with electronic ballasts. Vinco also moved fixtures to enhance lighting when possible, as in cases where a fixture was directly over a shelving unit rather than over the aisle where the light would be more beneficial.

Skyvision's investment was approximately \$17,000, and rebates cut that down to about \$13,000. Before the retrofit the company's average monthly demand was approximately 28 kw. With the new systems in place that will be reduced to about 13.5 kw.

"When it was all said and done, EZ-Lights helped Skyvision increase light levels and reduce energy consumption," said Jon Fabre, Otter Tail Power Company product developer and program manager. "And that's what this program is all about."

The future looks bright

Otter Tail Power Company launched EZ-Lights in May 2006 as a two-year pilot project in its Fergus Falls service area. If it's successful, the utility will expand the program to businesses and agricultural operators in other areas of Minnesota.

Initially, Otter Tail Power Company hoped to enroll 15 participants a year. The CEE already has done three audits, about 25 businesses are on the waiting

list, and Otter Tail Power Company has increased its target to 30 participants a year. In the end, though, it's all about conserving energy, and the goals are to save 203,000 kwh, or 54 kw, of electrical demand annually.

In the process, EZ-Lights provides the incentive small operators need to do something to help themselves in the long run.

"We needed to upgrade our lighting eventually anyway. So, why not grasp some of the savings right now and be ready before it becomes a critical issue," said Jose. "It took an initial investment, but it's an investment in Skyvision's future."

Summer cycling

New option available for summer load control

Dual-fuel customers with more than 80 kilowatts of connected load have a new option available for summer load control. Summer cycling allows appropriate loads in your facility to be set up to cycle 15-minutes on and 15-minutes off during control periods between May 1 and October 31.

How it works

With this option heat pumps, process pumps, and other equipment that you deem appropriate may be set up to cycle. The price of the electric power is the same as the straight control scenario, but the equipment functions in 15-minute increments providing operational benefits, such as space cooling during control periods, to your facility. Your electrician even can reconfigure heating and cooling loads to bypass present connections to your standby generator and cycle during the summer season. Your Otter Tail Power Company energy management representative or industrial services engineer can discuss this option with you in more detail.

Helping address load management

Otter Tail Power Company is looking to increase controllable load available for load management during the summer season. And offering cycling on dual-fuel and deferred-load rates is just one option our company is implementing to address this issue.

The radio receiver controlling your dual-fuel meter must be reprogrammed to switch to the cycling options. Contact an Otter Tail Power Company representative to learn more.

Dual-fuel meter

Radio receiver



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