

The future looks bright for Bacon Veneer Co.

PerformanceEdge™

A Product of  ALLIANT ENERGY

Background

Surf boards, skate boards, kitchen cabinets, vehicle dash boards, executive office furniture. What do these all have in common? They're all made with wood veneer – a product produced at Bacon Veneer Company's manufacturing facility in Grundy Center, Iowa.

The largest supplier of decorative and architectural-quality veneer in the United States, Bacon Veneer's growing manufacturing facility recognized a need for increased efficiency. "We had 287,000 sq. ft. of manufacturing and warehouse space full of bad lighting," said Joe Darter, Bacon Veneer general manager. The old fluorescent lamps and 1,000-watt mercury vapor fixtures were high maintenance and inefficient.

The facility's low power factor (PF) was also a concern. Utility customers are penalized if their PF is below the minimum level established by the rate applied to the customer.

ing improvement project and the installation of a capacitor bank – an energy storing device used to improve their PF. The Performance Edge program provides companies with a way to invest in energy-saving equipment without the burden of upfront capital. The projects are paid through the energy and quantifiable non-energy savings.

The manufacturing facility replaced 77 mercury vapor fixtures and 285 florescent fixtures with 73 high-efficiency 400-watt pulse start metal halide fixtures and 84 pulse start metal halide 250-watt fixtures. The effort was coordinated with the manufacturing schedule and completed in two phases. The capacitor bank was installed over a weekend.

Results

"We analyzed the first billing month against an old statement to validate the cost savings. When compared kWh to kWh (and without the power factor penalty) we had a positive number," said Darter. "It's like Alliant Energy is paying us to have better more efficient technology."

The lighting improvement project will yield about \$27,000 in annual energy savings or 452,530 kWh – about five percent of their annual electric use. The capacitor bank project provided the company with annual non-energy savings of \$2,500.

Bacon Veneer also uncovered other non-energy savings. "Prior to the lighting project, we moved pallets of veneer to a showroom for customers to see the grain, color and structure. Now, with much better lighting, we can open a pallet anywhere in the warehouse," explained Darter.

Recommendations

"Once you complete the evaluation, it's a no-brainer – you save energy and it makes you money," Darter said.

"The Alliant Energy team was very helpful and cooperative; the process went very smoothly."



Dave Reisetter, Bacon Veneer maintenance manager (left); Scott Arnold, Alliant Energy account manager; Joe Darter, Bacon Veneer general manager, inspect some veneer.

Solution

Bacon Veneer took advantage of Alliant Energy's Performance Edge program to implement a light-