

Case Study: Orrison Distributing, Glenwood

By Cam Burns/CLEER



Orrison Distributing Hopes for a Cool \$16,000 in Energy Savings Each Year

Sixteen grand is a lot of cash. And \$16,000 is how much Rick Orrison and the other co-owners of Orrison Distributing expect to save each year on their electric bills—at the very least—now that they’ve had a lighting retrofit done in their 39,000-square-foot warehouse facility in Glenwood Springs.

Indeed, from February through September 27 of 2012, the company saved \$16,775 over the exact same period in 2011, “according to my Xcel bills,” Orrison said. “It’s definitely paying off.”

Orrison Distributing, which distributes various brands of beer in the Roaring Fork Valley, was started by Rick’s father, Carroll, in Cheyenne, Wyoming, in 1955, and expanded to the Roaring Fork Valley in 1965. Rick



Anthony O'Neal operates one of the forklifts at Orrison Distributing. Photos by Cam Burns

Orrison and three partners bought out his father in 1987.

Rick knew about energy efficient lighting but in 2011 when a friend, Rick Broadhurst, founder of R&A Enterprises, told him about lighting rebates available through Xcel Energy and CLEER, Clean Energy Economy for the Region, which runs Garfield Clean Energy’s programs, he knew it was time to act.

“Rick told me there were great re-

bates available if I switch out all my fluorescent T12s and metal halides and get them replaced with LEDs with motion sensors,” Orrison said.

When Orrison signed his company

Lessons Learned

- LEDs are far more efficient than conventional lighting
- Rebates are available for most lighting retrofits, commercial and residential
- Out of pocket costs after rebates: \$29,919, which will be paid for in less than 2 years

The Upgrades

- Replaced metal halide and other lamps with LEDs
- Added occupancy sensors
- **\$16,775 saved between February and September 2012!**

up for the Garfield Clean Energy Challenge in 2011, his annual electric usage was 661,040 kilowatt-hours per year, which cost him \$54,959. CLEER and electrical contractor R&A Enterprises worked together to involve Franklin Energy (a subcontractor to Xcel Energy who offers free lighting assessments for commercial customers) to better understand the energy savings potential and associated rebates.

In summer 2011, Ellison Bruce and Ryan Mercer of Franklin Energy conducted several analyses that suggested that Orrison could save 133,443 kilowatt-hours per year—the same amount used by about 19 homes in a year—or about \$10,640 per year in cash—by switching his lights. Many of Orrison’s lights were metal halide lamps, which burn as much as a thousand watts apiece. In one of his estimates, Mercer calculated the lighting retrofit could save 116.5 metric tons of carbon dioxide per year.

In January 2012, Orrison hired R&A Enterprises to replace 73 interior and 8 exterior metal halides with LEDs (the 1,000-watt metal halide lamps were replaced with 196-watt LEDs). R&A also added about a dozen occupancy sensors, which turn lights off when there’s no one in a room.

Altogether, the lighting upgrade cost \$50,021. Xcel allows rebates to be paid directly to the contractor. In this case Xcel paid \$15,102 directly to R&A to help bring down the project cost.

Orrison paid R&A the remaining \$34,919 and then received a rebate



Left: Electricians from R&A Enterprises install new LED lighting. Right: Brian Thomasson works with the thousands of crates of beer in the warehouse.

for \$5,000 from Garfield Clean Energy, dropping his final out-of-pocket cost to \$29,919.

According to Orrison, both the utility and Garfield Clean Energy made getting the rebates straightforward.

“Yeah, it was good working with Rob [Morey] at CLEER,” Orrison said. “It was easy.”

In late September 2012, Orrison dug out his old electric bills and “the result was really quite stunning,” he said.

Orrison Distributing’s energy savings for the months from February to September 2012 were 42, 49, 46, 49, 43, 40, 45, and 40 percent lower—an average of 44 percent lower for the entire period.

“And that’s just the savings in changing the lights from fluorescents and metal halides to LEDs,” he said.

“LEDs (light emitting diodes) are becoming the light of choice for many home and business owners,” Morey noted. “They use typically a fifth of the energy of traditional lighting, and don’t require a warm up time like some fluorescent lamps. While they cost more upfront, the price has decreased significantly in

recent years and they have been shown to save more energy, and thus money, than most types of lamps on a life-cycle basis.”

The other benefit of LED lamps is that they generate a lot less heat, meaning the company doesn’t have to run its cooling equipment as much in the summertime—thereby saving even more energy and money.

The new LED lamps aren’t quite as bright as the 1,000-watt metal halides lamps he had removed, Orrison said “but the savings are well worth it. We get enough light in there that we’re fine.”

Orrison Distributing’s cost savings of \$16,775 between February and September 2012 mean Orrison’s out-of-pocket costs for lighting will be paid off in less than two years.

“I think it was a good choice,” Orrison said. “I have to thank Rick Broadhurst for alerting me to this.

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