

One Business

Energy Conservation Program



Minnesota Power

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Mike Polzin, Facilities Manager
Minnesota Power

Minnesota Power is Walking the Talk of Energy Efficiency

The recently remodeled employee cafeteria at Minnesota Power’s general office building in downtown Duluth is a pleasant place to grab lunch or catch up with co-workers. Its warm natural hues and wood-inspired furnishings reflect a corporate value of environmental stewardship—punctuated by rows of energy-efficient light emitting diode (LED) lights.

Replacing the cafeteria’s fluorescent tubes and incandescents with LEDs is part of an ongoing effort to convert lighting throughout Minnesota Power’s 22 office and service center facilities to LED technology.

“Minnesota Power is 100 percent committed to LED for any additional lighting,” said Mike Polzin, facilities manager. “We are all in.”

Not long ago, Polzin was an “optimistic skeptic” who wanted to believe in LEDs and other emerging energy-saving technologies but needed proof that they worked and made business sense. Like many folks in building operations and facilities management, he often fields calls from vendors and product representatives promising the next best thing to improve building performance.

“I am always a bit hesitant when someone comes to me with new technologies,” Polzin said. “I take it with a grain of salt.”

“It is good to showcase technologies in our own facilities. We are walking the talk.”

Craig Kedrowski,
Lead Energy Efficiency Analyst, Minnesota Power

Representatives of Minnesota Power’s Power of One® Business team offered to help Polzin and the Facility Management Group identify and evaluate energy-saving opportunities.

“There are always facility projects in the company,” said Craig Kedrowski, lead energy efficiency analyst, Minnesota Power. “We offered the services of one of our consultants, Tanuj Gulati, as a resource to explore opportunities to incorporate efficiencies into these projects.”

Gulati, senior energy engineer for Energy Insight, Inc., has worked with Minnesota Power’s commercial/industrial customers for nine years. He and his CIP colleagues invited Polzin to meet with facility managers of other large, multi-facility organizations that worked with the Power of One® Business program. They included representatives from St. Louis County, the City of Duluth, UMD, Essentia Health and the Minnesota Air National Guard. Members of this peer group toured each other’s facilities, attended joint presentations on LED lighting, and shared information about what energy improvements they had made and how they were working.

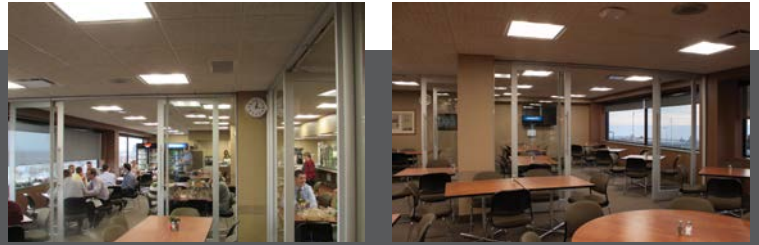


"Hearing the testimony of other end users had a big impact. Some were very strong advocates for LED," Polzin said. "Seeing St. Louis County's LED lights and lighting controls in practice sealed it. I became a disciple."

we are using one 10-amp breaker," Polzin said. "That is significant. It proved to me that this is something we should incorporate wherever we can."

"We have been focused on lighting, but going forward we are looking at energy-efficient heat pumps for circulation, heating and air conditioning."

Mike Polzin,
Facilities Manager, Minnesota Power



In 2014, Minnesota Power started incorporating LED lighting into its office and service center facilities. In addition to the cafeteria, three high bay LED lighting projects with controls were completed at service centers in Crosby, Park Rapids and Pine River. Mechanics at the facilities agree the new lights create better, brighter places to work safely—while using far less energy.

"The service centers used to leave the lights on all the time because the old ones took so long to get started," Gulati said. "The new LEDs come on instantly. They also have occupancy sensors so they dim down or turn off when there is no movement and immediately increase intensity when someone comes into the area."

The entire fourth floor of the general office building in downtown Duluth is currently being remodeled and soon will have all LED lights and controls. Additional floors will be remodeled in the next few years. Minnesota Power also plans to install LED lights and controls in its parking ramp to improve safety, increase security, enhance lighting quality and save energy.

"The contractors (who did the cafeteria) told us we were using six 30-amp breakers before and now with LED lighting

With the Power of One® Business team's help, Polzin and his team have been able to compare LED products and negotiate significant discounts in pricing, helping to offset the upfront investment. Incentives from completed projects are being used to purchase LED retrofit kits for other facilities, and, in addition to the energy savings, there should be significant savings in maintenance costs because LEDs last 10 years or more.

"We have been focused on lighting, but going forward we are looking at energy-efficient heat pumps for circulation, heating and air conditioning," Polzin said. He added that there is an ongoing recommissioning of building controls in the general office building and four other facilities to ensure systems are operating as designed.

"It all comes together as a total package," Polzin said. "I knew we had a CIP group, and members would talk to us about energy efficiency, but they have proven its effectiveness through their own expertise, by bringing in manufacturers and by forming a peer group to share war stories and successes."

"Customers often ask us what Minnesota Power does internally to conserve energy," Kedrowski said. "It is good to showcase technologies in our own facilities. We are walking the talk."

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