



AN ALLETE COMPANY

SUCCESS STORY

SAVE ENERGY. SAVE MONEY. SAVE TIME.

MINNESOTA FRESH HELPS MOVE PRODUCE FROM FARM TO TABLE, SAVING ENERGY ALONG THE WAY

Meals cooked at home with fresh, natural ingredients are simply delicious. Those made with Minnesota-grown produce are even better.

Few know this more than the folks at Minnesota Fresh of Long Prairie, Minn. The company quietly processes and packages farm-grown vegetables for meal kits sold at some of the country's largest retail groceries. Each vegetable pack consists of "fresh-never-frozen" potatoes, carrots, onions and celery.

COMPANY PUTS DOWN ROOTS IN MINNESOTA

Minnesota Fresh started as Kidco Farms, named after its original location in Kidder County, North Dakota. When North Dakota's oil boom exploded in the early 2010s, it became nearly impossible for the growing company to find local workers. It packed up and left, eventually landing in Long Prairie, Minn. The west-central Minnesota farming community was a perfect fit.

"It has a good labor pool, well-developed infrastructure, and potato farms right here," said Monte Benz, President, Minnesota Fresh. "We couldn't be any closer to Minnesota's premier potatoes. After we're done with the early dig potatoes here, we move up to the northwestern part of the state to our storage potato suppliers."

The Minnesota potatoes along with vegetables brought in from other parts of the country are processed quickly and efficiently to preserve freshness.



Efficiency is a hallmark of Minnesota Fresh and its operations. Since opening its Long Prairie facility in 2016, the company has added space, capacity and employees-always with an eye toward maximum efficiency and minimal waste. Minnesota Power's energy conservation program has been a partner in this effort, starting when the company first put down roots in its service territory.

MINNESOTA

POWER BECOMES A TRUSTED ENERGY ADVISOR.

Minnesota Fresh officials bought their current facility in 2015 and immediately set about expanding and transforming the former warehouse into production space. They designed their proprietary food processing system themselves and keep it closely guarded—but they are proud to share some of the energy-saving features employed in their operations.

During initial remodeling and construction, Minnesota Fresh worked with Minnesota Power and its energy consultants to identify energy-saving opportunities and access rebates for installing efficient lighting, heat pumps with efficiency ratings higher than Minnesota State Code, and variable frequency drives (VFDs) on its processing line motors, air compressor and exhaust fans. Over the next few years, it added high efficiency cutting equipment, made additional air compressor upgrades and incorporated more VFDs into its processing operations. These choices resulted in electricity savings of more than





100,000 kWh per year, helped the company avoid thousands of dollars in annual energy costs and qualified for significant rebates from Minnesota Power.

Soon Minnesota Fresh installed an air compressor with variable speed controls to better match flow capacity with the energy required of the compressor. That choice helped the company save an additional 61,000 kWh electricity per year and also qualified for significant rebates.

It only made sense to once again tap Minnesota Power's technical expertise and commercial energy conservation resources when it came time to expand the facility in 2021-2022.

COMPANY OFFICIALS ARE PASSIONATE ABOUT EFFICIENT, SUSTAINABLE GROWTH.

Dillon Malay is a program and services representative for Minnesota Power, whose territory includes the Long Prairie area. He recalls his first visit to Minnesota Fresh with commercial energy consultant Tanuj Gulati of Frontier Energy as the company was planning its expansion.

"We ended up having a long conversation with Monte (Benz) about the proposed expansion," Malay said. "He started talking about improvements they had made in their existing process lines and facility. Then he pulled out his pointer, and we were looking at different video feeds and cameras, immediately engaging in



Dillon Malay, Minnesota Power Customer Programs and Services Representavtive.

that conversation about efficiency and sustainability. I was taken aback by his connection with the facility and desire to improve operations."

The most recent addition incorporated LED lighting and VFDs to control fans and refrigeration compressors. Additional energy savings were achieved through the design of process pumps, conveyors and other motors controlled by VFDs, plus insulation, transformers, air conditioners and refrigeration compressors that exceeded code. Annual energy savings related to the expansion project totaled more than 200,000 kWh

and are helping the company avoid roughly \$14,500 in annual electricity costs.

"We have a lot of motors and automated equipment," said Jon Ramsey, CFO, Minnesota Fresh. "Dillon (Malay) and Tanuj (Gulati) really helped us out with rebates for variable speed drives, which saves a lot of energy. Having support from Minnesota Power improved payback and really made that piece more doable. Being able to install LED lighting throughout the facility also was a big thing,"

Lighting is critical in food processing. The expanded facility is bright and sparkling clean with gleaming food-grade stainless steel equipment that washes the potatoes, peels the onions and prepares the carrots for packaging. The new LED lighting improves safety and quality control, helping employees on the line monitor equipment and identify produce that does not meet the company's quality or uniformity standards. Pulled produce is not wasted but bagged separately and donated to Second Harvest food banks or given to local farmers for feed.

EFFICIENCY IS THE RIGHT CHOICE FOR THE COMPANY AND COMMUNITY.

"Folks at Minnesota Fresh want to do right by the community and in the process be as energy efficient as possible," said Tanuj Gulati, director/senior energy engineer at Frontier Energy and a Minnesota Power commercial energy consultant. "They also want to set an example, so people that do business with them see how efficiently they are running their business."

"We feel very fortunate to be in this area," Benz said. "When we purchased this piece of property in the fall of 2015, we were not planning to expand, but everything fell into place. COO Mary Iszler and seven other North Dakota employees got us ready to start producing vegetable packs in 2016. Right now, we have around 60 employees. and we are putting out almost 45,000 vegetable packs per day. Without our outstanding employees and staff, none of what we do would be possible."

"They use space very efficiently with modular production lines that maximize every square foot while still maintaining safety and egress," said Malay. "It is not a giant facility but they put out so much product. The planning is very purposeful and well thought out."

In addition to ongoing energy analysis, technical assistance and rebates, Minnesota Power's energy consultants have assisted Minnesota Fresh with a compressed air study that identified leaks in their system.

"We have learned a lot of things from Minnesota Power," said Benz. "They have shown us different ways of doing things to operate more efficiently and save money. It is a good relationship."